

JOURNAL OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS

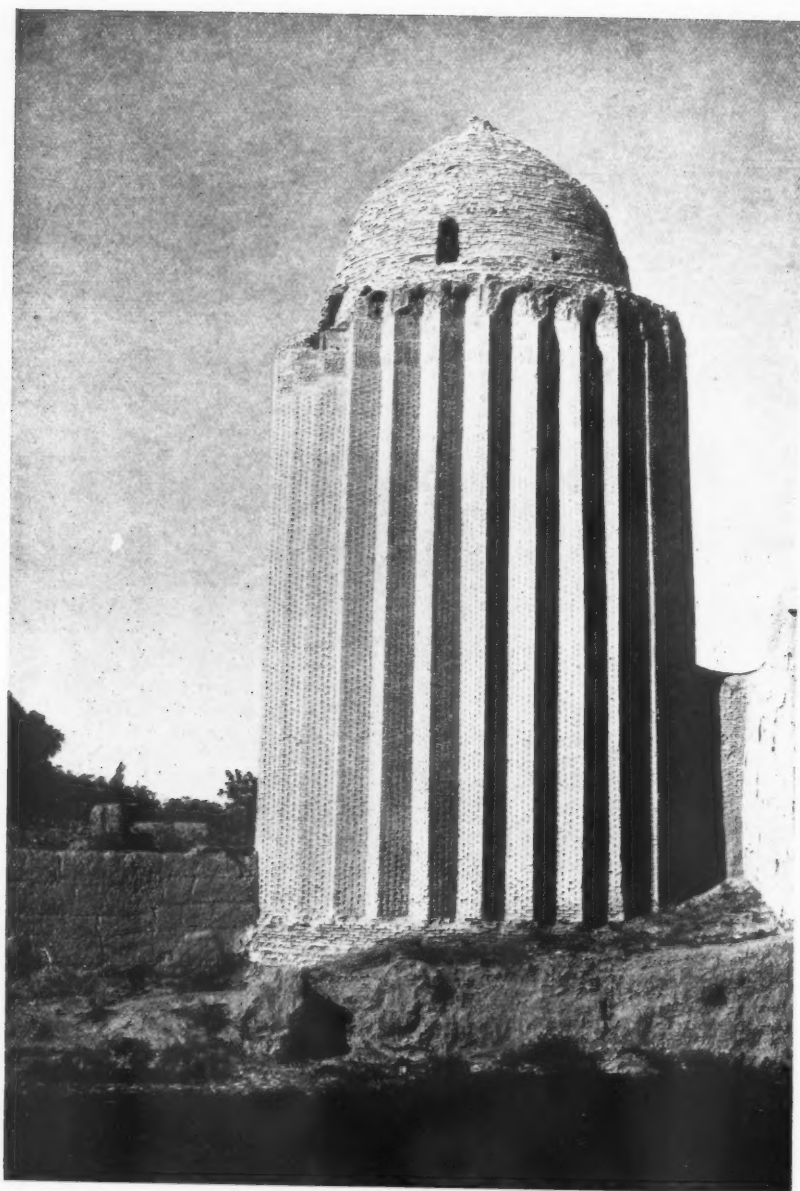
THIRD SERIES

VOL. 43. No. 16

27 JUNE 1936

CONTENTS FOR 27 JUNE 1936

	Page
BOSTAM, IRAN, TOMB TOWER	<i>Frontispiece</i>
JOURNAL	843
PEASANT ARCHITECTURE IN THE NORTHERN PROVINCES OF SPAIN. A. G. Ling	845
OPENING OF THE EXHIBITION OF PHOTOGRAPHS OF PERSIAN ARCHITECTURE	864
B.B.C. REGIONAL STATIONS	867
REVIEW OF CONSTRUCTION AND MATERIALS	872
BOOK REVIEWS :	
HELLENISTIC ARCHITECTURE	874
A NEW SHORT HISTORY OF ARCHITECTURE	875
A HISTORY OF RELIGIOUS ARCHITECTURE	875
THE S.P.A.B. BRIDGE SURVEY	876
GRAND TOUR	876
UNIVERSITY BUILDING	876
PLANNING LITERATURE	877
ARCHITECTURAL DATA	877
BUILDING COMMODITIES	877
REVIEW OF PERIODICALS	878
ACCESSIONS LIST	880
C.P.R.E., R.I.B.A. AND I.O.B. ADVISORY PANELS	881
ANNUAL ELECTIONS RESULTS	882
NOTES	884
OBITUARIES :	
DAME HENRIETTA BARNETT, D.B.E. Sir Raymond Unwin, P.P.R.I.B.A.	885
C. HOWARD WALKER. Walter Millard [<i>Ret. F.</i>]	886
FRANCIS BAUGH ANDREWS [<i>F.</i>]	886
FREDERICK JOHN ING [<i>F.</i>]	886
ADRIAN ELMY SPACKMAN [<i>Ret. A.</i>]	886
ALLIED SOCIETIES	887
NOTICES	887
MEMBERSHIP LISTS	888
COMPETITIONS	889
MINUTES XII	891
MEMBERS' COLUMN	892
A.B.S. INSURANCE DEPARTMENT	892



BOSTAM—TOMB TOWER. From the Exhibition of Photographs of Persian Architecture

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JOURNAL OF THE ROYAL INSTITUTE *of* BRITISH ARCHITECTS

VOL. 43. 3RD SERIES

27 JUNE 1936

No. 16

Journal

THE BIRTHDAY HONOURS

In his first Birthday Honours list the King has conferred the honour of Knighthood on Mr. E. Guy Dawber, R.A., F.S.A., Past President of the R.I.B.A., and Vice-President and Chairman of the Council for the Preservation of Rural England, and on Mr. James Grey West, O.B.E., F.R.I.B.A., Chief Architect of H.M. Office of Works and Public Buildings. Mr. Alfred Edward Simpson, Fellow of the South Australian Institute of Architects, Architect-in-Chief, State of South Australia, has been awarded the Imperial Service Order.

ARCHITECTS' INDEMNITY INSURANCES

At the request of several members of the Institute and some of the Allied Societies, the Practice Standing Committee are considering the question of architects' indemnity insurances, and in particular the high rates of premium which underwriters at present require for such policies. The Committee are now considering a scheme whereby members in private practice will be able to secure these policies at an annual premium which is believed to be considerably less than the premiums which are in operation at present. The scheme, however, cannot be put into operation unless *a minimum number of 750 policies can be absolutely guaranteed.*

In the JOURNAL of 9 February 1935 an article by Mr. Maurice Webb, Chairman of the Architects' Benevolent Society Insurance Committee, drew attention to the fact that :—

- (a) of the total number of architects in independent practice not more than 15 per cent. were insured ;
- (b) during the past thirteen years about 40 per cent. of those *insured architects* had claims made against them covered by the policies ;

- (c) about one-third of the claims notified had failed to mature ; and
- (d) the small percentage of architects insured, coupled with the relatively high ratio of claims, made it incumbent upon underwriters to charge premiums considerably higher in rate than would be the case if the profession generally made a practice of insuring.

It has been pointed out that unless more architects take advantage of these policies, this form of insurance may cease altogether.

The scheme at present under consideration by the Committee provides for a maximum cover of £5,000 for an annual premium of £8. In cases in which a firm consists of more than one person an additional premium of £2 for each partner over and above one, and for every technical assistant other than the clerical staff, would be charged ; thus, for a firm consisting of three partners and three technical staff, the premium for a twelve months policy would be £18. Copies of a specimen policy may be obtained on application to the Secretary, R.I.B.A. Members who are prepared to support the proposed scheme are asked in their own interests to send their names at once to the Secretary, R.I.B.A., in order that the minimum number of 750 can be guaranteed and the scheme put into operation.

ARCHITECTS AND PROTECTION IN AIR RAIDS

The General Meeting on 22 June was occupied by a variety of business. First Professor William Emerson brought greetings from the American Institute of Architects. He said that it had given them great pleasure to elect Mr. Percy Thomas and Sir Ian MacAlister as Honorary Corresponding Members of the A.I.A. Then the results of the annual elections, given elsewhere in this issue, were announced, after

which Colonel William Garforth, of the Home Office, gave a paper on "Some Principles of Protection in Air Raids." The paper was listened to with close attention, and as the subsequent discussion showed, those present realised that architects owed a duty to the community to study this problem. As the President said, as architects we must set aside in our minds the political aspect and concentrate on the technical side. A report of the meeting will be published in the 18 July number of the JOURNAL.

PRESENTATION TO THE R.I.B.A. BY THE NATIONAL JOINT COUNCIL FOR THE BUILDING INDUSTRY

At the Council Dinner before the General Meeting the custom of "no speeches" was for once waived. The occasion was the presentation to the Royal Institute by the National Joint Council for the Building Industry. As members should be aware, the Joint Council is representative of building industry employers and operatives and exists for the purpose of arranging wages and hours agreements. For many years its labours have been remarkably successful and an example to other industries. On behalf of the Joint Council the chairman (Mr. W. E. Collier) asked the President to accept a "Treasury" design inkstand as a mark of their gratitude for the use of the R.I.B.A. Council Room for their meetings—which Mr. Collier described as "neutral ground." The following inscription is engraved on the inkstand: "Presented to the Royal Institute of British Architects by the National Joint Council for the Building Industry in appreciation of the Royal Institute's hospitality and of their interest in the Council's work on behalf of the Building Industry." Other members of the Joint Council who were present at the dinner were Mr. R. Coppock, Mr. I. Ernest Jones and Mr. H. B. Bryant.

THE ROME SCHOLARSHIP

The Rome Scholarship in Architecture for 1936 has been awarded to Mr. P. E. D. Hirst, B.Arch., of the Liverpool University School of Architecture, and the Faculty have also awarded a special premium of £100 to Mr. Hubert Bennett [A.], of the Manchester University School, who received an honourable mention in the competition. Mr. Hirst is the eighth Liverpool trained Rome scholar. He is 25 years of age, and was born and educated in Liverpool. He obtained his B.Arch. degree in June, 1935, with first class honours, during his university course he won in successive years the Ravenshead, the Holt, the H. W. Williams and the Lord Waring travelling studentships, and this year he won the Honan scholarship. Mr. Hirst is now a studio instructor in the Liverpool School of Architecture.

Mr. Bennett is 26 years of age. He was born and educated in Manchester. In recent years he has won the Arthur Cates prize, the Soane Medallion and the Neale Bursary. At present he is staff lecturer and instructor at the Polytechnic School of Architecture, Regent Street, London. The Rome scholarship is provided for by an annual grant made to the British School at Rome by the R.I.B.A., and is ordinarily tenable for two years.

EVERYDAY THINGS—A RADIO TALK

On 6 June Mr. H. W. Maxwell, Director of the Bristol Museum and Art Gallery, gave a talk on the Western Regional Radio on the Exhibition of Everyday Things. He compared the Everyday Things Exhibition with the normal commercial show, and had a number of generous things to say about the R.I.B.A.'s spirit in organising the Exhibition and the quality of their control over the exhibits. His talk gave a useful little fillip to the Exhibition, to which almost seven thousand people came during its time in Bristol. Now it is resting at Liverpool, where it will be opened on 4 July by Lady Rutherford. At the same time that the Everyday Things Exhibition is on show in Liverpool the R.I.B.A. Exhibition of British Architecture of To-day will be at the Williamson Art Gallery, Birkenhead.

THE CONFERENCE

This paragraph is being written just before the start of the Conference, which will be over before the JOURNAL is published. The chief thought before any conference is perhaps one of anxiety about the weather, because the architects, wiser in this than many of their fellows in other professions, when they hold a conference spend most of their time in the open air seeing architecture. At the moment the weather seems determined to be kind, so that the Conference Committee must be relieved of many of their anxieties, and the visitors full of anticipation for an excellent time enjoying the particular attractions of this seaport gathering. Even the queasiest landlubbers may, if things on Thursday and Friday are as they are to-day, embark on the sea and air trips with no thoughts of impending disaster.

KALENDAR 1936-1937

We wish to draw the attention of members to the slip inserted in this number of the JOURNAL. They are particularly asked to send in changes of address as soon as possible and, in the case of partnerships, to give the names of the firms with which they are connected. This latter information is to be added in the Register of Members on the recommendation of the Practice Standing Committee.



PEASANT ARCHITECTURE IN THE NORTHERN PROVINCES OF SPAIN

PART OF THE R.I.B.A. PRIZE ESSAY
1936, BY

ARTHUR GEORGE LING

INTRODUCTION

In peasant architecture the fundamental issues in building are made more clearly apparent. Social, climatic and geographical conditions all combine to produce an architecture in which fashion or style play little or no part. The primitive need for shelter from the sun and rain induces the peasant folk to build shelter for themselves and their cattle. There are no architects. The peasant knows his wants and builds. With his meagre resources he builds as simply as possible in the local material available. He is able to conceive and create his work because of the simplicity of his life and needs. It is a clear expression of his life, simple and direct. Up with the sun, looking after the land, ploughing, sowing and reaping; hard work, and then home at night to a long drink of wine, a meal, and an early bed—the simple five-finger exercises of living; and his house is as simple as the black and white notes on a piano keyboard.

The abstract and purely æsthetic beauty of a column, the decorative effect of a frieze are outside his comprehension. A plain white wall, a dark window opening, a red-tiled roof, these he understands not for their æsthetic, but for their practical value. Utility comes first. Beauty follows, resulting naturally from the constructive elements and the colour and texture of the materials.

Popular art and architecture is unconsciously produced by these simple uneducated peasant folk. Clear, simple,

modest, without pretence or whim, it forms the basis of all art and culture, and is there to inspire the art and architecture of a more learned people. For with learning come personal caprice, fashion, style. Only by constant reference to the art of a more primitive people can these be overcome. The nature of peasant dwellings is conditioned for the greater part by natural factors. Town dwellings with their ease of communication tend towards uniformity, but in the humble dwellings of the field and farm, where outside influences have had, as yet, little effect, there persist all the regional characteristics due to the prevalent climatic and geographical conditions, and to the local material available. Domestic architecture in a primitive society is a natural collective product of the earth and climate, under the guiding hand of man. According to the resources of the earth of the district, the houses are of stone or brick, and in conformity with the climate, the roofs have greater or less pitch. Steep where rain and snow abound, flat where the sun is dominant, and between these limits a rich variance.

Beyond these natural conditions man is bound down by his social and economic status. This has strong influence on the nature of the building he erects, for with riches, man can master the elements, blast away mountains, bring marble and alabaster from afar; but in poverty he accepts the rain and snow, bows down to

the hills, is thankful for the material which Nature has provided for him at hand.

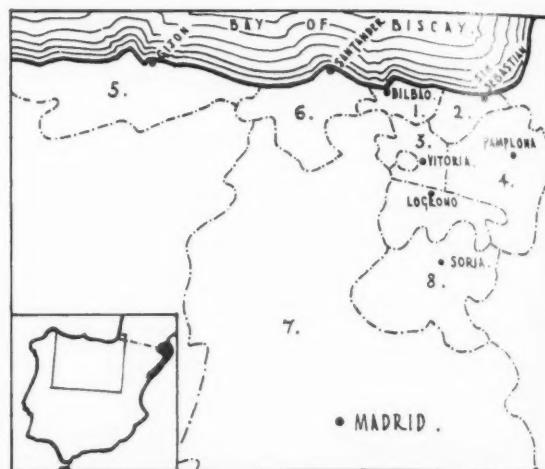
The study of peasant architecture thus resolves itself primarily into a study of all the factors that have any influence on its nature and character. These can be classified in three groups : geographic, climatic, social. The first consists of the nature and constitution of the ground and the type of vegetation ; the second, of the nature of the weather ; the third, of the characteristics of man's social life, his economic position, and his own individual character. All these factors are so closely interwoven that it is impossible to analyse one alone, but a study of all three will give a true basis on which to examine in detail the architecture of the Spanish peasants. For peasant life is indivisible ; its setting, its work, its games, its architecture, all are one.

The historical factor has so far been ignored. True peasant architecture knows no time ; it represents the past, the present and the future. So long as natural conditions predominate this permanency will continue, but as soon as man creates new social conditions which predominate over the natural, change is inevitable, and will be clearly expressed in the architecture. In pre-historic times the people lived in caves and sordid hovels, without light or ventilation. So strongly have natural conditions prevailed that such dwellings still exist in Spain to-day. But the moment of change is here.

Up to the end of the nineteenth century peasant art had not been moved by any form of copyism, Nature was its only source and inspiration. Life was static, and the needs of the peasants changed little. The art of constructing one's house was handed down from generation to generation through the centuries. Each generation was confronted by the same problems. The position of the kitchen so that its fire warmed the house ; the character of the roof so that it afforded good protection from the inclement weather ; such were their problems. With their own hands the farmer-builders worked the materials of the earth into a dwelling without guidance or plan other than that which tradition afforded. The farmers had their carpenter's bench and their set of tools. They knew how to construct walls of mud or rubble, build a roof truss, and lay tiles. Everyone was able to build his own house, and this was for them a labour of love. Individuals, building according to their own personal wants, with the local materials available.

But now the professional builder has appeared, the carpenter's bench in the farmer's shed falls into disuse, and the tools rust. The peasant architect builds no more.

The peasant folk begin to lose their simplicity and sincerity ; they begin to value pretentiousness and ostentation ; their life is in a period of transition. Their traditional crafts give place to the machine, producing a flood of articles of an imitative luxuriousness. The town



MAP OF THE NORTHERN PROVINCES OF SPAIN

1. Viscaya ; 2. Guipuzcoa ; 3. Alava ; 4. Navarra ; 5. Asturias ; 6. Santander ; 7. Castile ; 8. Soria

shop supplies them with light, curved wood furniture, bamboo work, cheap printed cottons, ugly brass and chromium bedsteads, and a thousand and one other articles, all of the same execrable taste. For their houses they prefer those cheap, thin-walled houses put up by the professional builder, to the old solid houses of their ancestors, work of their own hands. The peasant furniture, pottery and textiles pass into the hands of the antique dealers. All those lovely things which have been handed down from generation to generation, things which gave joy to their mothers, now go to decorate the homes of the bourgeoisie. For they, after a surfeit of machine-made goods, seek more solid delight. So with one hand they display to the peasants their decadent machine-made goods, and with the other take from them all their family treasures for their own delight. Azorin well says : "No, it is over ; one cannot bring them back to life ; the process of time cannot be changed ; the customs, the regional styles, the games, the songs, all these will be modified and changed. We live in a new age."

But this change is inevitable if the peasants are to aspire to a new and fuller life. For in their hearts they yearn for something more than the mere five-finger exercises of life. They look to the machine to relieve them of this burden, and give them opportunity to weave their lives into a rich melody. If in the period of change they encourage ugliness, they must be forgiven, for to find themselves, they must first lose themselves. When confusion is past, the peasants will find fresh inspiration in their old life for the fulfilment of the new.

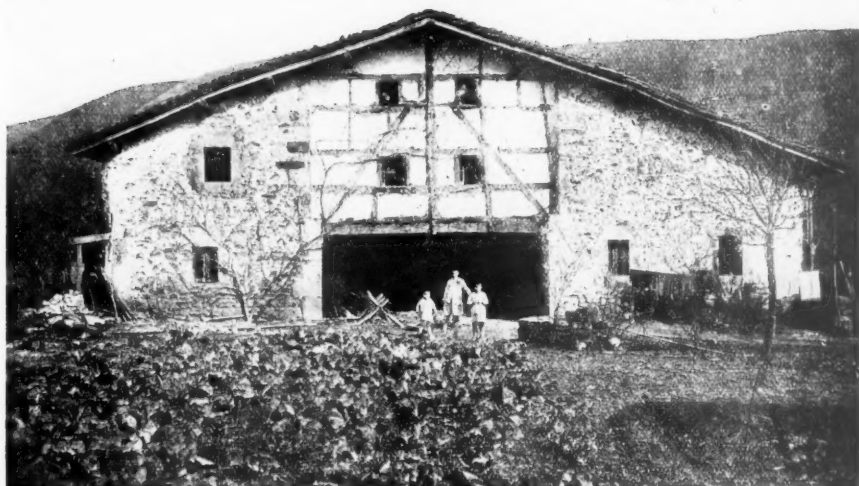


Fig. 2. Farmhouse in Viscaya

THE BASQUE COUNTRY

The home of the Basque lies in the north-east corner of Spain and consists of the provinces of Alava, Viscaya and Guipuzcoa—a region of hills and mountains, wooded slopes and quiet valleys. The Alavan countryside has little personal character but serves as a transition between the classical scenery of Castilla and the romantic landscape of Viscaya. The Guipuzcoan countryside is more severe in character, borrowing a little from the sobriety of Navarra. Viscaya is gay and lighthearted, full of spirit. The climate experienced here is temperate; the clouds caught by the hills pour frequent rains into the valleys until the streams and rivers are full and the fields are flooded, but days of brilliant sun and blue sky alternate with the rain. Snow falls in the mountains.

No one has succeeded yet in penetrating the origin of the Basque race. They are people of mystery, which their mountain home does little to dispel. Their language is unique in the world, the vocabulary having no resemblance to any known tongue. Many of the words date back to the Stone Age; the words for most sharp cutting instruments, such as axe, pick, and knife, deriving from the word for stone. Former ethnographers saw in the Basques the remnants of pre-Roman people who were unable to preserve their independence elsewhere, being driven into the Pyrenees in much the same way as the Ancient Britons were driven into the West. More recent archaeological and anthropologic evidence, however, gives strength to the theory that the Basques are the survivors of the paleolithic in-

habitants of the Western Pyrenees, and that they have never inhabited a region much more extensive than their present home.

The Basques contribute a new outlook to the world of painting, literature and industry. They delight in trying to startle. The people are instinctively gay, filling their spare hours with games, dancing contests, and other pastimes. They have adopted all the modern sports, cycling, football, billiards, adding them to their own rich store, that tradition has produced, bowls, pelota, rowing contests and boxing. They are kind people, reserved at first, becoming true friends on closer acquaintance.

The abundance of springs and streams makes it possible for the people to spread out over the hills, and there to lead a farming life. Each farmhouse has its own tract of land sufficient to support a family. These scattered farmhouses are the real basis of the country. A village springs up round a church but it is never large; the real village consists of families each with their separate house and land, living among the hills and valleys. This distribution helps considerably in developing and maintaining the Basque individual character.

The Basque farmhouse is Spain's most beautiful contribution to peasant architecture. No æsthetic pretensions, no scholastic preoccupation, no style, inspires the farmer-architects: their way of living, the climate and the materials that Nature affords them are their guide.

The two main elements are the low-pitched tile roof



Fig. 3. Farmhouse in Elorrio, Viscaya

and the soportalon or porch. The earlier form of porch consisted of a simple recess in the ground floor façade, with a lintel supporting the wall above and generally occupying the central part of the house. The façade above this opening was constructed of light material (Fig. 2) until the eighteenth century, when the arch came into use (Fig. 3). Some of the houses are constructed mainly of wood, others of stone, according to the locality and the abundance of the different materials. Brick is used in combination with wood, sometimes brick alone is found; but as a general rule the ground floor is constructed of stone rubble in order to make the house secure against damp, and the lighter, less permanent, materials are reserved for the upper storey. Dressed stone is only to be found round the arched openings to the porch. The deep eaves supported on brackets are typical of the Basque house.

Only in the mountains, where the winds are strong and snowfalls heavy, does this characteristic disappear. The climatic conditions demand it. The porch is suppressed, the windows are reduced in size, and the eaves are reduced in order to lower the wind pressure and lessen the area of the roof, which has to carry the weight of the snow.

The planning of the house is very simple. The kitchen is in the centre of the house on the ground floor; in winter it serves as a living room as it is the only place where a fire can be lit; from the kitchen the stairs lead to the bedrooms above. The rest of the ground floor is kept for storing the farm implements and produce of the land (Fig. 4). Sometimes these are collected together in a small separate building, grouped with the beehives or cart sheds.

Very few houses are to be found without some kind of decoration; sometimes the entrance door is decorated with iron studs wrought in the form of primroses, sometimes the wooden lintels and timber framework are carved with geometric patterns of very original character, a coat of arms is placed over the door or the keystone richly carved. These districts can boast of many fine craftsmen. Viscaya is particularly rich in decoration.

The houses of Viscaya have a much more prosperous air than those of the neighbouring province of Guipuzcoa. In the former the porches are arched and the stones carved in a decorative way. In the latter they are invariably lintelled and without decoration. In Guipuzcoa they are all very similar: rough white walls with black openings, small entrances; only a few with large openings for the porch. Many of them are in a dilapidated condition, with crumbling mortar.

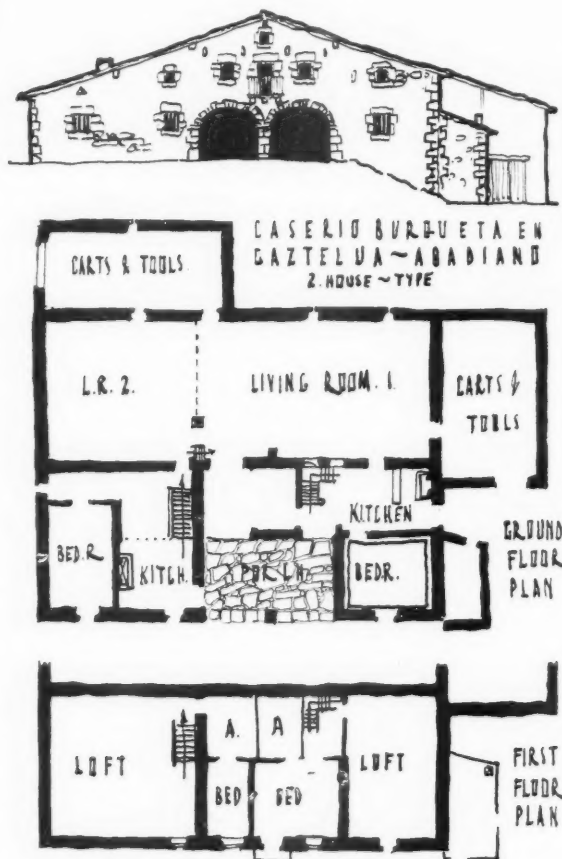


Fig. 4. Plan of farmhouse in Abadiano, Viscaya

The churches are harsh compared with the simple peasant dwellings. They are built of hard yellow stone in a decadent Baroque style. Along one side runs the deep covered porch, where the churchgoers stand and gossip after the service, sheltered from the rain.

The smaller wayside chapels, however, are as simple and honest as the farmhouses. Their usual form consists of a rectangular stone building with a campanile on the western end, and a porch covered with a timber-framed hood extending the whole length of this end (Fig. 5). These chapels, found standing alone by the roadside, unite the scattered farmhouses. The hermitage is also a very simple building; most of them are built high up in the mountains, completely cut off from life below except for an annual pilgrimage from the peasants.

The tower houses of the district date from mediæval times, when life was very insecure and banditry and raiding were constantly to be feared. These tower houses are fortified buildings, with walls as thick as six feet, small narrow windows on the ground floor and a little larger above; below, the cattle and farming implements; above, the family (Fig. 6). When banditry had been checked and a peaceful life ensured for the inhabitants, they began to build houses with wider windows, and alter the existing ones.

Sheep pens are scattered here and there on the high pasture land; they consist of a stone wall with a low building along one side, where the shepherd sleeps and cooks his meals. This building is very rudimentary, consisting of a kitchen and a bedroom; sometimes there are other rooms for storing cheeses made by these shepherds. The floors of these shelters are made of rammed earth.



Fig. 5. A wayside chapel in Viscaya



Fig. 6. A tower-house in Llodio, Alava

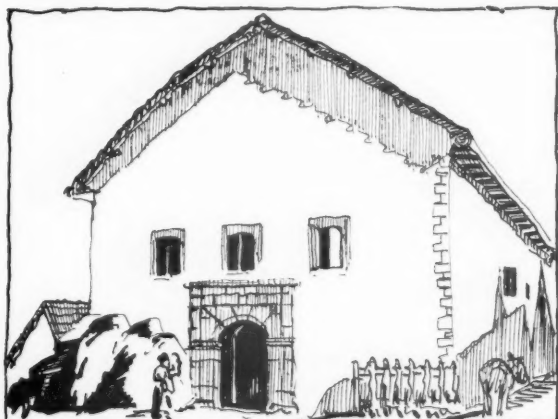


Fig. 7. A farmhouse in Abaurra, Alta

NAVARRA

On the lower slopes of the Pyrenees, and in the hollow between them and the Cantabrian belt, lies the Province of Navarra. Its geographical position does not lend itself to isolation, and it receives influence from all the surrounding provinces. Such influence, together with that of the climate, gives to the peasant architecture an interesting variety.

The province does not display any unity of geographic or climatic condition. Within its boundaries these conditions vary from high mountain peaks where snow and rain abound, to level plainlands that are dominated by a hot, dry sun. In the mountainous district the land is chiefly pastoral, and the houses have much in common with those of the Basque country, particularly in the east. The Burguete district is the highest of the province, and heavy snowfalls are experienced; such conditions demand a sturdier type of architecture. The more representative type of Navarran house is to be found in the lower slopes of the Pyrenees. This is characterised by its large dimensions, its shallow pitched roof covered with red tiles, its whitewashed walls with dressed stonework round the door and window openings left apparent. Between this district and the southern plainlands there is a type which borrows from both its northern and southern neighbours. It is here that the timber-framed house is chiefly to be found. Finally we have the caves and houses of mud and brick of the south. The harmony between these types and the countryside in which they are found is complete. On the rugged mountains of the north, stone walls, steep, slated roofs, and small window openings; on the lower undulating hills, whitewashed walls, shallow red-tiled roofs and sun balconies; on the plains, flat roofs and mud and brick walls. The artistic senses are fully satisfied.

The character of the Navarran peasants is as strong

but not as interesting as that of the peasants of the other northern provinces. In their social life they display little interest in anything but the necessities of daily life. They are a simple and severe people.

This severe simplicity is a marked feature of their houses. The only ornamentation results from constructive elements, from windows and doors, from roofs and the divisioning of floors, and from the materials themselves. A house is built as a house, and nothing more. The result is utility divorced from all fantasy. For this reason peasant architecture in this province is distinguished by its predominance of line and mass rather than by its beauty of detail. The straight line is its most eloquent expression. (Fig. 7.) Sometimes the doorways have an arched lintel, but this is by necessity of construction rather than by intention in design.

In complete contrast to this sincere and honest building is the architecture of the churches. Religious architecture resists more than any other the penetration of the peasant style. Even the houses of the nobility show a certain sympathy with the humbler dwellings, and are differentiated only by their size and a little added enrichment. But the churches are in complete discord. They are constructed mainly of hard stone, in a coarse, flamboyant style, with interiors as gaudy as fair booths. They express a social order in which the church, overwhelmingly rich, dominates a poor peasantry.

The climate has a direct influence on the nature of the roof. In a dry climate, a flat roof is obviously the simplest and most economical if the span allows it. Where the climate is more humid, a two-sided pitched roof becomes the logical construction. Where snow and rain abound the four-sided steep-pitched roof takes its place. The inclinations of the roofs in Navarra are very variable, ranging from the horizontal to as much as sixty degrees. As a generalisation these can be divided into three types, the low—ten degrees to twenty degrees, the medium—twenty degrees to forty degrees, and the high—forty degrees to fifty degrees.

Now the areas in which these three types are to be found correspond almost exactly to the climatic and geographical formation of the province. The high type in rugged and mountainous country where snow and rain are abundant; the medium type on the lower slopes of the Pyrenees, where the rain is considerable, but snow is rare; the low type in the plainlands where the sun is predominant.

The depth of the eaves has a similar relation with the climate. In the north, where rain is considerable, the roofs have deep eaves, generally protecting a balcony on the first floor. In the region of Burguete, where an abundance of snow falls, the eaves are shallow, so that the area on which the snow has to be supported shall be as small as possible.

For roof covering, tile dominates. It is in two colours, red in the north, white in the south. In the

Burguete district a flat tile is sometimes used. This is necessitated by the steepness of the roofs, which cannot support the weight of curved tiles. In Valcarlo and in the valley of Goni stone-slatted roofs are to be found. Where timber is abundant, shingles are often used. The nature of the local material available has a more direct influence than the climate on the type of roof covering. In the Goni Valley the climatic conditions are similar to those of the Burguete district, and demand steep roofs to throw off the snow, but the local roof covering material is stone slates, and in order to support these the pitch of the roofs in this district has been reduced to twenty to thirty degrees. In order to reduce to a minimum the area of the roof on which the snow has to be supported, the eaves projection is cut down almost to nothing. In so doing no protection is given to the walls of the house. To compensate for this they are built much thicker, and the door and window openings are made much smaller. Aesthetically the effect is very fine; strong, solid buildings, articulated with small dark window openings.

The walls of the buildings support the roof without resort to any form of pier. Stone, wood and earth (fired and in its natural state) are the materials used. Stone is predominant in the north. It is generally employed in the form of rubble with dressed stones for the surroundings to window and door openings and on the corners of the buildings. This is the most economical method. It is only the wealthy who can afford to differentiate their houses from the rest by building completely in dressed stonework. Limestone is the chief stone used. Since the introduction of mortar the rubble is united with this into one homogeneous mass, and often this is covered with a rendering of cement and whitewash; but the real peasant type of construction is one in which no mortar is used at all. Good examples of this type are to be found in Allo, Larraga, Mendigorria and Ujué.

Timber is used for the framing of walls, roofs and floors. Wall-framing is found now only in the country surrounding the rivers Bidasoa and Urumea. The limit of this area seems to coincide with that of the curved tile; this is no coincidence, for in the making of these tiles the available timber is used up. At one time timber framing extended over the greater part of the province, but gradually the stock of timber has been exhausted, and the style has slowly disappeared, except in this district. Here the moderate climate encourages this type of construction. It consists usually of horizontal and vertical timbers, generally occupying the upper floors only, the ground floor being of stone rubble. The floors are emphasised, forming part of the construction; often they slightly overhang one another, though never with any substantial depth. A peculiar characteristic of this overhang is that it is found only on the main façade of the building. This is a distinctive feature of the Navarran timber house. There is little

variation in the style of timbering; the builders are not sufficiently skilled to try any complicated work, and their desire for simplicity persists. But timber-framed walls are not popular with the people, they prefer a strong stone wall to protect them.

Where there is a lack of both stone and wood the peasants make use of the earth itself. The most primitive use of the earth is in the form of caves and underground dwellings. Natural caves are still used for habitation in Spain, but in Navarra most of the inhabited caves are artificial. They consist of simple excavations in the earth divided into compartments which form the separate rooms. Most of them are excavated in the side of hills. The continuation of this primitive kind of architecture is one of the many amazing features of Spanish peasant architecture. The region occupied by these caves is extensive enough. In Valtierra, Azagra, Mendavia, Caparrose and Peralta 20 per cent. of the people live in caves or underground dwellings. In Arguedas there are 30 per cent., while in Milagro the percentage is as high as 35.

For the most part the caves of Navarra are badly ventilated and unlit. Only the poorest of the peasants live in them. Lack of money forces them to live the life of animals. To live in one the permission of the municipal authority has to be obtained. Often they are inherited. There are a few as clean and comfortable as many of the houses built above ground, but, for the most part, they are in a dirty and uninhabitable state. They are usually on one floor, but there are several instances where the cave is of two storeys, with an internal staircase cut into the earth. Often the caves are in two or more storeys, with each storey as a separate dwelling. Access is given by means of an external staircase cut in the earth. In fact cave building involves all the standard forms of dwelling. There are cave bungalows, cave houses, and cave flats.

Each cave dwelling usually has a small porch, a kitchen, a bedroom and a living room. The living room receives light and air from the outside; the kitchen and bedrooms have no light, and usually only such ventilation as comes through the main door. The kitchen has a chimney and this affords a little through ventilation. There are no lavatories. The few windows that the cave possesses are wooden-framed, with the jambs whitewashed. There is only one door, the entrance; inside, curtains divide the rooms and afford a free passage of air to the rooms beyond. In the better caves the interior walls are whitewashed, the floors are tiled or of well-rammed earth. The rooms are about 8 ft. 6 in. high. A flat terrace of earth sometimes runs along in front of the cave.

Rammed earth walling is the next cheapest form of building, but that has little strength on its own, and is usually combined with a framing of wood or brick.

Clay brick is another form in which the earth is

used. Often whole villages are built with this kind of material, and its colour, similar to that of the earth itself, makes them appear to be growing out of the ground. The peasants cut rectangular blocks from the ground and allow them to dry in the sun. Moisture tends to break up these bricks; they are therefore used only where a dry climate predominates. The life of the houses constructed with this material is over a century. The clay is a bad conductor, and the peasants find that houses so constructed are warm in winter and cool in summer; but in spite of this, it is only used where it becomes an economic necessity. Peasants with enough money to build otherwise shun its use; it is left to the very poor alone. It has, for this reason, a degrading effect on its users.

Brick is the most advanced form of utilising the earth as a constructive material, and it is to be found in use all over Navarra in stone districts, as well as brick. It is used chiefly in the plainlands where stone is unobtainable; but it is only the wealthy who can afford it.

The door openings of the houses are usually rectangular, with a two-leaved wooden door, but the semi-circular and flattened arched openings are frequently employed. There is little decoration in these doorways.

The window openings of the province are particularly small and narrow. This is not entirely due to the climate, for they are built in this way on the northern slopes, where it is necessary to get as much light as possible. It may be due to the difficulty there used to be of obtaining glass, for now that it is possible to obtain plenty, large windows are being introduced. Decoration is sometimes to be found on the window jambs, but this is of a very simple nature.



Fig. 8. A farmhouse in Oronoz

The attic storey frequently has a doorway leading on to a balcony (Fig. 8). Here the peasants put their onions, maize, and other cereals to dry. The eaves are carried right forward to protect the balcony from the rain, and where the balcony is on a side wall, a small roof is carried over it and supported on corner posts. The sun balcony is only found in the driest parts of Navarra. Wood and wrought iron are the materials used in the construction of these balconies, the latter being chiefly used for the miradors, a type which serves solely as a means of looking out.

The soportal, or porch, serves as a kind of vestibule to the house and as a store for agricultural implements; this feature is found in the peasant house in districts which experience a heavy rainfall. It consists of a deep recess on the main façade of the ground floor the opening to which is either square or arched. Public soportals are to be found in most Navarran towns. They serve as a meeting-place for the people, where they can take their paseo in wet weather.

The chimneys are of four kinds, cylindrical, conical, square and rectangular, but the first two and last two can be grouped together. The first is used when the fireplace is in the centre of the house, the second when it is to one side. The latter, the more usual kind, has a semi-circular canopy, which gathers the smoke together and emits it through a rectangular-shaped chimney.

In many cases the houses are completely whitewashed and the woodwork painted a strong blue. This makes strong contrast with the red-tiled roof, and in the sun, against a background of green hills, is full of colour and shadow. The stone surrounds to the door and window openings are of two kinds: one where the stones are all of equal length, the other where they are alternatively long and short. The second makes the more interesting pattern, especially when the rubble work is whitewashed. Often this apparent stonework groups doors and windows into a pleasant pyramidal composition (Fig. 9). Eaves are usually very simply fashioned, with a square or rectangular section. Only occasionally do we come across one with any form of carving on it. The supports to the balconies, when they are of wood, are generally formed of heavy beams of a square section. Coats of arms adorn many of the Navarran houses and form very decorative features, but these houses were once those of noblemen and such features were their means of differentiating their houses from those of the peasants.

The houses of the mountain districts of the north and of the plainlands in the south represent the two extremes in size of the Navarran house, those of the mountains being very large, and of the plainlands very small. In the first group exception must be made for the Burguete district, where the houses are of smaller dimensions on account of climatic conditions. South

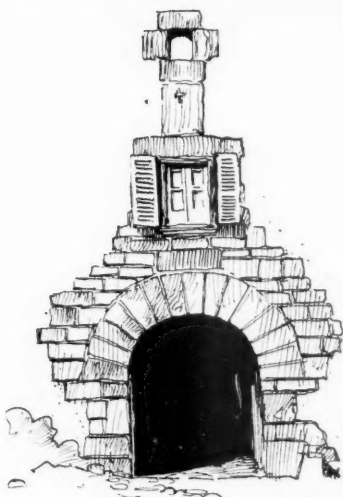


Fig. 9. A doorway to a house in Alcoz

of a line which goes from Vicena to Navascués, the size of the houses reduces considerably and they begin to be grouped in villages. The change is similar to that experienced in passing from the green hills and isolated farmhouses of the Basque country to the dry plains of Castile with their houses huddled together in small villages. The people in the north are blessed with abundant rains which produce a rich soil and enable them to lead a reasonably prosperous farming life. In the south, on the other hand, the earth is unfertile and yields little to the peasants.

The planning of these houses is very simple, usually rectangular or square. Most of the houses are of more than one storey, the people generally disliking to live on the ground floor. Only in the Ribera, in the south, is the single-storey dwelling to be found. In the valley of the Goni and in Arazuri, houses of two storeys only are to be found, but the usual type in Navarra is that

with three storeys. There is good reason for this. The ground floor, with its soportal, serves as a store for agricultural implements and a stable for the animals; the first floor is taken up by the living quarters; the second or attic floor is used as a family store for apples, vegetables and cereals. This way of living is often emphasised architecturally in many of the houses by an external staircase of stone or wood leading up to a door on the first floor, thus separating distinctly the living quarters of the human beings from those of the animals (Fig. 10). This disposition is the explanation of the absence of any farm buildings in the district; everything is housed under one roof.

As regards planning of the individual rooms, the usual disposition consists of a central corridor lit at each end, with the rooms and staircase leading off. This is most satisfactory and economical as regards light, air, and independent communication between each room. It is in order to obtain this type of planning that most of the four-sided roofed houses have a rectangular plan.

Few types of buildings other than houses and churches are to be found in Navarra. Small chapels, with white-washed walls and with a wrought-iron campanile on one side of the gabled ends of the roof, are to be found in villages which are not large enough to warrant a church. Such chapels are in complete harmony with the peasant houses around them. Defence towers are to be seen dotted here and there over the province: these date back to the times when life was very insecure. They have strong stone walls with narrow slit openings. Any decorative features result from pure construction and efficiency of purpose. Some have a platform on top, corbelled out from the main wall. The pigeon tower has a very similar form, but the small openings in the walls define its purpose.

Of historical sequence there is little evidence in the architecture of the peasants. Only the houses of the rich, who could afford to do more than build, show traces of the changing style of time. The social change of the nineteenth century, however, is beginning to find its expression in the architecture.



Fig. 10. A house in Oroz Betelu

ASTURIAS

Asturias, the land of mountains and torrents, lies along the north sea coast between the provinces of Santander and Galicia. The physical formation of the ground and the nature of the climate tend to divide it into three main regions. The first consists of the country of the high Cantabrian hills stretching east to west, parallel to the sea. It is a region of hills and summer pastures, difficult passes, deep valleys, snow, rain and low-lying clouds. The second consists of the country stretching from the summer pasturage to the sea. The ground here is principally constituted of paleozoic materials. In prehistoric times the inhabitants of the land dwelt in caves, this region is particularly rich in such caves and drawings and traces of their habitation have been found in them. Woods of beech, oak, chestnut, alder, birch and linden cover a large proportion of the land. The mountain, wood and field, are the dominant features. Rivers and streams of clear water run through the green valleys; mountains of suave and gracious line tower up over the meadows and maize fields. The population is numerous and intensive; they are a small but energetic people; the men are miners, woodmen, cattle raisers and fishers of trout; the women look after the cows, make lard and cut the hay. The third region consists of the sea coast. Here the climate is more temperate, the rain less heavy. Walnut, chestnut and oak trees grow in the woods and by the wayside; fig trees, laurel bushes and American magnolias grow in the gardens; sometimes an orange or lemon tree. The people are grouped in large towns, such as Gijón, Aviles, Llanes; they are fishermen, industrialists and business men.

To the Englishman Asturias is one of the most sympathetic of all Spanish provinces. The climate is temperate, the country rich in scenery, and the people kind and hospitable. It is from this province that most of the colonisers have come. There is hardly a family that cannot boast of relatives in Cuba, Mexico, or some other part of South America. They are a people filled with the spirit of adventure.

The peasant architecture of the province divides into three types; the areas in which they are found correspond almost exactly with those three regions which we have just described, regions of distinct climatic and geographic conditions. The range in architectural expression is wide, from small and miserable houses of the mountains closed to the snow and rain, to the large and cheerful sea-coast houses open to the fields and sea.

The mountainous district is the poorest and least populated. The farms are small and very far apart. Communication is bad. The climate is hard. Maize and rye are cultivated where the climate is less extreme, but otherwise there is little industry here that encourages permanent habitation. Many of the houses are only built for summer occupation, when the farmers and shepherds bring their cattle and sheep up from the lower

slopes to seek summer pasturage. Cattle-sheds, cottages and houses go to make up the small village; but it is a village only in so far as the houses are huddled together. In most cases there is a narrow cart track leading up to it, and little conscious arrangement of the buildings is attempted.

The houses are generally built of rubble or slate according to the local material available. They are small rectangular buildings, usually of one storey, and with very much reduced window openings. The kitchen is the most important room, because it supplies the warmth of the whole of the house. It is entered either from an open porch or direct from the yard which is to be found in front of the house, enclosed by a low stone wall. In one corner of the room there is usually a bread oven, and adjacent are rooms for storing cheeses to dry. The bedrooms lead off from the kitchen, and are divided by wooden partitions. Some of the houses have a second storey, which is approached by a stone external staircase very similar to those used for access to the horreo.

The roofs are steep and hipped to throw off the heavy snow and rain. The roofing material varies according to the local material available. In Ibras and Aller the roofs are of slate; in the Picos de Europa they are tiled, but on account of the prevalent high winds these tiles stop short at the eaves. In the district of Tineo many of the houses are roofed with thatch.

Lena is one of the centres of the *madreña* industry. *Madreñas* are clogs fashioned by hand out of a single piece of wood. In these rainy districts they are indispensable to the peasants, who cannot afford the luxury of leather. For ordinary everyday use they wear shoes with rope soles and canvas tops, called *alpargatas*. When the ground is wet and muddy they slip their *madreñas* over these. In this village of Lena, all the houses have a porch facing south; here the peasants sit fashioning the wood into clogs.

The cowsheds are a more primitive kind of dwelling. They are usually constructed of stone rubble. On the ground floor is a stable for the cattle. An independent stone stair leads to an upper storey which serves as living quarters for the cowman. Often all the rooms are on one floor, the kitchen and bedroom leading off from one side of the stable. The kitchen and bedroom are often one and the same room. A bundle of straw serves as a bed. The roof covering varies—tile, slate, wattle and even branches of trees covered with sods of grass are used.

The central region presents a striking contrast. A temperate climate, a rich and abundant vegetation, a facility of communication, all combine to produce an architecture which expresses clearly the relative well-being of the people. There is a rich variety of buildings: farmhouses, mills, chapels, inns, washhouses and

horreos. The houses are built of stone rubble with dressed stonework on the corners and round doors and windows. The rubble is whitewashed, but the dressed stone is left apparent. The typical plan is rectangular, with one of its longer sides forming the façade. The roofs are shallow and gabled. The rooms are usually disposed on three floors. On the ground floor the house is entered by a porch. This consists of a recession in the main wall. It serves as a store for an interesting variety of things: farming implements, chests, tools, madreñas, baskets, and a stick to beat the pigs and round up the chickens; all these find their place there. The donkey with his panniers of bread is tied up there, and milk and maize and apples are given temporary storage. Leading off this covered porch is the kitchen from which a staircase leads to the upper floor. The kitchen fire used to be a very crude affair; charcoal was used as fuel, but wonderfully well-cooked food was produced from it. The bread oven is sometimes found as part of the main building at one end of the kitchen; at other times it is built as a separate small outbuilding. Above the kitchen fire is a canopy to take away the smoke; from it hang strings of red and black Spanish sausages. Modern stoves are now being introduced, but the oven is hardly ever used for cooking. At either side of the kitchen are stables, hay stores, and perhaps a bedroom. On the first floor, giving on to the balcony, is the family room or parlour; this is used on high days and holidays for entertaining friends and visitors. The rest of the rooms on this floor are bedrooms. On the floor above is the attic. This is the family store for apples, chestnuts, cider, potatoes, onions and old junk. On the sun balcony, manzanilla, maize and other herbs and cereals are put to dry.

This sun balcony takes on many forms. Near the province of Santander the balconies are protected by two lateral walls. This, however, is the result of outside influence, and is not a typical Asturian form. More typical is the sun balcony which is recessed in the middle of the façade between two small projecting rooms. It forms the ceiling of the porch and is supported by a stout beam. Sometimes the wooden balcony is cantilevered out from the wall and protected by a sufficient projection of the eaves above. Another variant is the corner balcony; in this type a post supports it at the corner. These sun balconies all face south to catch the sunlight; to the north the houses display a plain whitewashed wall relieved only by a few tiny window openings.

The sea coast district, by reason of its position, is open to considerable external influence. The people here are rich, and are able to afford frequent renovations to their houses. For this reason, few examples of the traditional type of house are to be found. They are similar to those of the central region except in so far as they are affected by the particular climate of the region. Often the porch has a central post which helps



Fig. 11. A horreo in Soberron Llanes

to separate the two doors which give off it, one to the kitchen, the other to the stables. The predominant house in the villages and valleys of the coast is of two or three floors, completely white, and with either a hipped or a gabled tiled roof. Window openings are numerous, and it is not rare to find sun balconies on more than one floor or façade. Llanes is a typical town of this region. Except when the rain clouds hang low and hide them in obscurity, the Cantabrian hills form a permanent background to the life here. The first range is only three miles from the sea. Llanes is a fishing village, and the fishermen and their wives are housed in one-storey cottages which face on to a green square. Their walls are painted in strong primary colours, red, blue and yellow, with which the white window jambs make a strong contrast.

The peasants are fond of social life, and look forward eagerly to the fiestas. On these days the girls don the traditional costume of the province, and flock to the green to dance and make merry. Rockets are fired and processions held. They are days for singing, drinking, dancing and love-making. On Sundays the men of the village play their traditional game of bowls.

The horreo is a typical Asturian structure (Fig. 11). It is a small square wooden building with a hipped tiled roof standing on four or six supports. These supports are generally about six feet high, and either of granite or limestone. In districts where stone is rare they are made of wood. They stand on a base of rough stone, and are covered by flat round stones about three feet in diameter. On these are supported the floor beams, which extend to form a gallery with a protecting rail of decorated wooden spindles around it. Corner and intermediate posts support the roof, which is brought forward to protect this gallery from the rain. The woodwork is usually painted a rich blue, which soon weathers into a soft transparent colour. This building serves as a store for the fruits of the earth;

maize, wheat, potatoes, beans, apples, chestnuts, etc.; it is constructed in the way described so as to prevent the rats from making an entry. Sometimes a low wall is built at the base of the structure to form a place for storing hay. The horreo marks the prosperity or poverty of the home.

The only churches of real interest in this district are to be found near Oviedo; here there are ten churches built by the Visigothic inhabitants after they had retreated northwards from the Arabs at the beginning of the eighth century. The other churches in the province were built much later at a time when monumental architecture was dominated by French and Italian influence.

The smaller peasant buildings, the mills, the shelters over the stream where the women wash their clothes, the small chapels (Fig. 12) and the hermitages all partake of peasant honesty and simplicity.

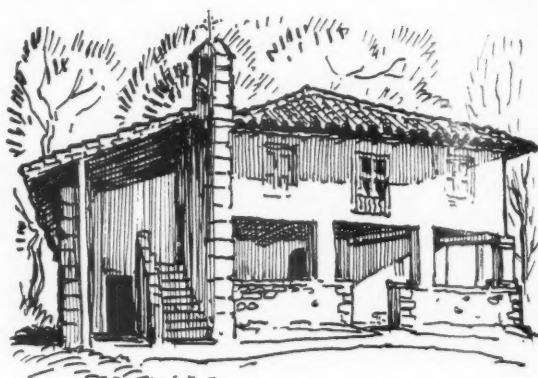


Fig. 12. A combined wash-house, school and chapel in Soberron Llanes

SANTANDER

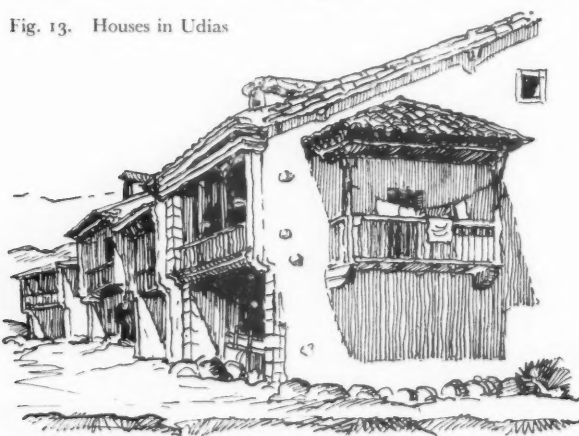
The province of Santander receives its waters from the range of Cantabrian hills. It is a region of mountains, hills, streams, valleys, and fields. A temperate climate—sun and rain on the lower slopes, snow on the hills. The district possesses excellent materials of construction: walnut, chestnut, and oak; limestone and sandstone. The inhabitants are shepherds, cattle men, and farm labourers. Many of them emigrate to South America where, by sheer tenacity and sparse living, they become successful and prosper. With their acquired fortunes they return to their native village in the hills and build a fine house where they spend the rest of their lives enjoying the fruits of their hard work.

The history of the Montanesa house begins in early times when the primitive and rudimentary state of civilisation in which the people lived necessitated only mean and miserable dwellings; the most horrible

promiscuity between men and animals was the ordinary mode of living. This province was little affected by the Romanisation of the rest of the land or by the invasion of the Moors; for these northern heights were the last stronghold of the retreating Visigothic inhabitants and were never completely captured. During the thirteenth and fourteenth centuries numerous defensive towers were built to house soldiers and cavalry, and were sometimes combined with a house. In the middle of the fourteenth century the King granted privileges and judicial powers to the noblemen and this led to the abandonment of these tower houses in the open countryside, and to the adoption of large town villas. The tower form continued for some time and from it developed the twin-towered house of the nobility.

The craftsmen of this district show a vigorous individuality imbued with a respect for past tradition. The walls of the houses are of stone rubble reinforced with larger stones where strength is required. The roof framing, floors, and balconies are of wood; the roofs are tiled and of low pitch. A soportal or porch extends the whole width of the house, with a central column if the span is sufficiently large. In the more refined work the openings are arched. This porch, one of the most important elements of the house, serves as a store for tools, carts, and wood for the winter fires. To either side of the porch the stables and hay store are found; in the centre is the main entrance opening on to a hall, with a staircase leading to the floor above. Straight ahead on the ground floor is the kitchen. On the first floor the sala, or parlour, and the bedrooms are situated. The sala is placed in front of the house, with high casement doors leading on to a long wooden balcony. The side walls are brought forward six or seven feet, and the floor beams of the first floor are extended to the same depth. These support the balcony. The

Fig. 13. Houses in Udias



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eaves are brought forward a similar distance and are supported on the end walls and on intermediate posts. This accommodates itself to an arrangement of houses side by side, where one wall suffices to support the balconies of the houses on either side (Fig. 13). When the porch has arched openings, the wall is often carried up flush with the level of the openings, and the wooden balcony gives place to one of wrought iron. Wood-work is generally painted blue or light red. An interesting form of balcony is to be found on the side walls of some of the houses (Fig. 13); it consists of a small cantilevered wooden balcony sheltered by a tiled roof that is supported on corner posts. When the floor of the balcony is of stone, it is corbelled out of the wall and protected by a wrought-iron railing.

There are several variations from this main type, particularly in the districts of Larianega, Campurriana, and Cabuerniga, but they are due more to external influence than local tradition. The village of Santillana del Mar is full of typical Montanesan houses; but now it is a village for the nobility rather than the peasants. Barreda is a typical small village, with inhabitants depending entirely on the land for their existence. It has no conscious arrangement: just a few houses collected together by the roadside in a setting of green hills and yellow poplar trees. The roads are little more than cart tracks, with a few large stones placed here and there to serve as stepping-stones in rainy weather. To one side there is a small chapel with a single bell in a low campanile. Close by is a shrine; a statue of the Virgin Mary stands on an altar surrounded by candles, separated from the

peasants by a wrought-iron grille. The cart track opens out into a square surrounded by houses. In the centre is a stone table with seats of the same material around. Here, after the day's work, the men sit and talk or play cards. The houses inside are very simple: plain wooden floors, whitewashed walls, and the minimum of furniture. Many of the older houses are little more than slums, but on the outside at least the sun saves them. It makes a ruined wall shine with brilliance.

The pink-grey limestone churches are square towered with bells hung high. Many of them are comparatively simple outside but decorated inside with all the devices of architecture, in an attempt to create an atmosphere of moral superiority.

In the Reinosa district the houses have much in common with the houses of the Navarran provinces. The walls are whitewashed except for the strengthening stonework, which makes delightful patterns round doors and windows. The roofs are tiled; there are no balconies.

Towards the hills the houses become fewer, the sun balcony begins to disappear, and the windows get smaller. The climate is harder. Through the pass the winding road curves its snake-like way into the mountains; snow lies in drifts by the roadside, and the view is obscured by heavy clouds. The clouds begin to thin, blue sky can be seen, and soon there is clear, bright sunlight. A cold wind blows. Behind lie the hills and grey mists, ahead the open plains of Castile. A new land.

CASTILE

Old Castile extends from the Cantabrian belt in the north to the range of mountains south of Toledo. It is a level plainland broken only by the Guadarama heights, which cut across from east to west, north of Madrid. An intense dry sun, extremes of temperature, glaring light and little rain, an unfriendly climate for peasants. Castile is full of loneliness. The orchards are few and trees rare. Tall thin poplars break the horizontal line of the plain, blue mountains are in the distance. Vines, cereals and saffron are grown. Brake, rosemary, genesta, lavender, and esparto grass cover the banks and uncultivated land. The landscape is of a scale out of sympathy with man; the people collect together in small villages for companionship, and in the vast unsympathetic setting seek to create a small and intimate world of their own. Houses are rarely found as isolated buildings but grouped together in narrow streets as if space were scarce. The houses open on to these streets through low doorways and small windows, and turn their backs on the open country. An encircling walk completes the illusion of intimacy and satisfies the peasant's longing for something defined and tangible in the midst of space (Fig. 14).

Water is scarce and the position of a village is often decided by that of a stream or river. The villages in the plains are large but far distant from each other. The workers live in small houses of mud and brick, which from a distance seem to rise out of the earth from which they have been constructed.

The life of the people in the mountainous provinces of the north is easy: they have their houses with a small piece of land which yields sufficient produce to support the family with a relatively high standard of living. The peasants love their homes and take great interest in their furnishing.

In Castile in contrast life is hard, the earth is difficult to work, and fertile land is scattered; the parched earth in many districts has to be irrigated by channels of water pumped from a well. The peasants walk far over the plains to their work. No trees shade them from the sun, the dust gets in their throats, and they must drink wine. They delight in beautifying themselves rather than their homes: they love fine clothes and jewellery, but their furniture is simple.

The houses are very simple, without any æsthetic pretensions, but nevertheless attain a certain grace of



Fig. 14. Gateway to the encircling wall of Herrera

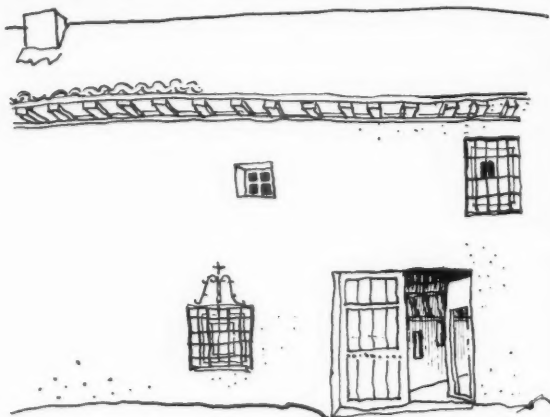
proportion without conscious effort. They are generally of two storeys, with a two-sided roof covered with semi-circular tiles and shallow eaves (Fig. 15). In the north, where rain abounds, the eaves are so deep that it is possible to walk on the pavements of the village without getting wet; but here there is little rain and the depth becomes unnecessary, the balconies disappear, and the windows become smaller to keep out the strong sunlight. The walls are of stone rubble whitewashed. In the clay soil, where stone and wood are not available, the walls are of rammed earth or unbaked clay bricks; brick is used, but only the rich can afford it. Where timber is obtainable, the mud walling is used as a filling to a timber frame. This construction is found in the surrounding districts of Burgos and Segovia. In the Guadarama district the clay walls are strengthened with brick on the curves and round doors and windows. Often the peasants seek to hide the mud and rubble with stucco, on which they paint stone or brick

jointing. This striving after a more pretentious style represents a desire in the peasant for social advancement. The doors are usually lintelled, and sometimes large enough to allow carts and horses to pass through, especially in roadside inns and hostleries. Sometimes there is a yard in front of the house for the cart.

La Tierra del Pan extends from Villa Pando to Zamora, the villages are brown like the earth and present the most forsaken aspect of Castile; villages of mud invariably dominated by a strong stone church tower.

The climatic conditions are similar over most of this province: the only variable factor is the sun, which grows in intensity towards the south; with this gradation the eaves and windows get smaller, and the house gradually opens out in the centre, until in Toledo a new feature is introduced—the patio; this consists of a square or rectangular courtyard on to which all the rooms open, not directly, but on to a wooden balcony supported on timber posts and protected by deep projecting eaves. In this way only tiny windows are needed on the streets; the larger windows on to the patio are sheltered, so that the rooms are well ventilated without exposure to intense sun (Fig. 16).

The more monumental architecture of Spain can be divided into two types. The one is executed by peasant craftsmen who have their simple tradition as a basis; they bring to a more advanced style a love of the honest and simple, to produce a work of richness which is neither pretentious nor blatant. The second type has no relation to peasant architecture at all: it aims at its complete subjection. The doorways and smaller churches of Toledo are good examples of the efforts of the peasants towards a richer style (Fig. 17).



ILLESCAS ~ TOLEDO

Fig. 15. House in Illescas, Toledo
(From the album of F. Mercadal and R. Eulate)



Fig. 16. Patio of the Posada de la Saugre, Toledo

SORIA

Soria is the land of red earth, coloured by the sun of centuries—a colour which dominates everything, stones, bricks, tiles and landscape and leaves a lasting impression on the mind. The province is made up of high table-land bounded by mountains; the Rioja to the north, the Guadarama to the south, and smaller ranges to the east and west. The river Duero is its life blood. The climate is treacherous; dry sun, cold winds and snow on the heights; but the peasants are hardened to it. Vegetation is meagre; a few poplar and evergreen trees, but otherwise nothing save rock and red earth.

External, climatic and geographical influences all tend to divide the peasant architecture of the province into five distinct types. The first, the most Sorian of them all, is the stone type of the north, in and towards the slopes of the Rioja. The second type is found in the south, where lack of available stone forces the peasants to use the earth as a building material. The third is the Pyrenean type of the west, where outside influences and a fairly abundant supply of timber have led to a style which has much in common with that of the province of Santander and the Basque country. The other two types find their centres at Agreda and Medinaceli; these are due more to external influences than to local tradition. The first is very similar to the Navarran type, a simple and severe style; the second occupies the district formed by the small area of Soria which cuts into the province of Guadalajara and shares in its style. These last two are insignificant in extent, and partake of little that can be termed as Sorian. The stone, earth and Pyrenean types dominate.

The stone type is to be found approximately north of a line running east and west through Soria, the chief town of the province. Here the countryside is very open with blue mountains in the distance; yellow-leaved poplar trees line a single road northward. The



Fig. 17. A doorway in Toledo

village of Almaza marks the transition from the southern earth type; here the walls of the houses are built of quarried stone rubble without any binding mortar. In the sun the separate pieces of stone cast shadows and give sparkle and life to the wall surface. (Fig. 18.) The roofs are of steep pitch, and covered with stone slates, roughly rectangular in shape, but varying considerably in size. The chimneys are rather curious. Two kinds are predominant, the conical and the rectangular. The first is to be found where the kitchen is in the centre of the house and the chimney in the centre of the room; it is built up of layers of stone slate. The second is found where the kitchen is on one side of the house and its chimney to one side of the room; it is built half of rubble, half of slate; the rubble carries up the inside divisioning wall (Fig. 19); the rest of the chimney having no internal foundation is built up as lightly as possible of these stone slates. The houses are usually approached by a corral or yard which is surrounded by a low stone rubble wall. The entrance doorway consists of a rectangular opening



Fig. 18. A house in Gallinero, Soria



Fig. 19. Detail of chimneys

filled by a two or four-leafed wooden door. The lintel to this opening is usually of stone, but wood is often to be seen. Dressed stone is sparsely used; the corners and the surrounds to door and window openings are generally strengthened by the use of larger stones, but these are very rarely worked to any substantial degree of finish. The window and door surrounds are often whitewashed. This is the reverse of the process adopted in the northern provinces.

The kitchen is the most important room of the house. This is situated either on the ground or first floor. A feature of the kitchen in this district is the oven, which is always expressed on the outside of the building; it is therefore an easy matter to locate the position of the kitchen. On the ground floor it is expressed as a semicircular single-storey building, with a stone rubble wall and a slate roof. On the first floor it is corbelled out on wooden brackets; a chimney is carried up above inside the house.

The climate here is unkind to the peasants; a cold, icy wind blows across the plains and in winter heavy snow falls. In defence the peasants build these strong stone houses with tiny window openings and steep roofs, without balcony or porch. The prevalent climate demands a simple stronghold.

Southwards, away from the hills, the strength disappears, the stone walls are whitewashed, and the roofs tiled; the stone is a more light-hearted grey in colour, the windows are larger. Soon we reach the area of mud and brick. The villages are few and far apart, generally by the side of a tributary of the Duero or the Duero itself. Almazan is the centre of these villages. Here many examples of mud and brick houses are to be found. The houses of mud are often left without any hard surface finish; then they look as though they are



Fig. 20. A mud house at Almazan

made of strawboard; the door and window jambs are whitewashed, and this provides contrast, and produces an amazingly beautiful and simple effect. (Fig. 20.) Some are colour-washed white, burnt sienna, red, green, blue and grey, the darker colours generally being reserved for the ground floor. The various colours are perfectly matched; the natural colour sense of the peasants is perfect. The general effect is that of a stage setting, and this is intensified by the rarefied atmosphere.

The main door in each case leads into a large white-washed hall with the staircase to the first floor leading off it. (Fig. 21.) An air of cleanliness prevails. The corral or yard to the house is surrounded by a mud wall which is protected from the rain by a covering of branches and twigs. Where the walls are curved they are strengthened by an aggregate of large round pebbles. Several of the houses have semi-circular ends; the plastic nature of the mud makes this form possible.

These mud houses are always found grouped together in villages. The open country and the hard climate arouse in the peasants a desire for a small world in which they can forget their surroundings.

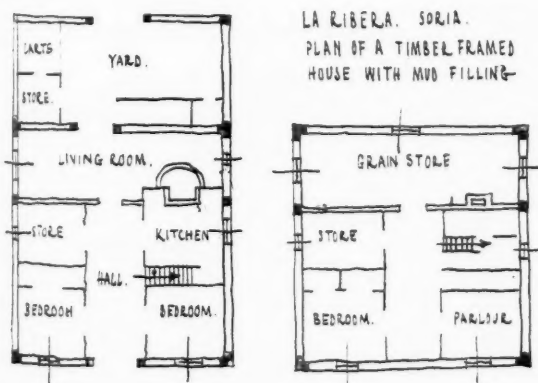


Fig. 21. Plan of a house in La Ribera

Fig. 22.
Ucero, Soria



Fig. 23.
Apse of the hermitage
of San Siguel



In the Ribera to the south-east, timber framing is used in conjunction with earth either in its crude state or as unburnt bricks; sometimes brick filling is used. Usually the ground floor is constructed of stone rubble, the timber framing being reserved for the upper part. In Ucero there is a remarkable variety of examples of this type of construction. The timber framing has every kind of filling imaginable, from baked brick to wattle. (Fig. 22.) The roofs are tiled and gabled. The chimneys are conical, built up on a pyramidal framework of timber. The openings to the south are large. The entrance door is in four parts, allowing the door to be opened at the top for ventilation, without allowing any of the animals to enter. Sometimes the first floor of the house projects in front of the ground floor, and is supported on the projecting floor beams.

The province has over a hundred Romanesque churches within its borders. They partake of the simplicity of the peasant houses, and are in complete harmony with them. (Fig. 23.) The church is always dominant; where a village is built on a hill the church is placed on its summit, and its dominance is even further emphasised. In the north, where the houses are of stone, the only mark of superiority that the church claims in its architectural expression is that the stonework is put together with mortar. A square tower houses the bells, a rich entrance doorway relieves the simplicity of the walls.

The houses of the Pirianego of Soria have similar characteristics to those of the provinces of Santander and the Basque country, but these similarities are more

in the façades than in the plans. The disposition of the materials of construction is the main characteristic of this type of peasant dwelling. The ground floor walls are always of stone rubble, while those of the upper storey are of a material much less resistant and poorer in quality, generally consisting of a timber framing filled with burnt or unburnt bricks, often forming quite decorative patterns. Frequently the framework is filled with a kind of interlaced basket work pargetted with mortar. When the houses are built separately they are usually rectangular with a hipped roof and with an entrance doorway on the long side with a balcony over it. More often they are grouped in small clusters with their main façades orientated towards the south and slightly separated from one another to avoid the spreading of fire. Fires are frequent in this region, and are sometimes responsible for the destruction of whole villages. They owe their origin chiefly to the bad practice the peasants have of laying the roof tiles on hay. Many of the houses have gabled ends, with the entrance doorway in one of these ends.

CONCLUSION

This study has made it clearly apparent that true peasant architecture is a logical result of the geographic, climatic and social conditions that exist. Up to the end of the nineteenth century the social conditions of the Spanish peasants had been static. The one condition that social life imposed on them as far as architecture was concerned was that their buildings should be as cheap and economical as possible. With this definite basis it was left to the geographical and climatic conditions to give expression and character to their architecture. Since then new materials have been introduced, and communication widely extended; these developments have helped to arouse in the peasants a desire for something more in life than a mere cycle of working, eating and sleeping. For centuries they have been completely subjected to the circumstances of Nature, and it is only natural that, given the slightest opportunity, they try to break away from them and create something which is governed more by the artificial conditions imposed by man. The effect of this is seen in many of the new buildings erected, which completely ignore the prevalent climate and are contemptuous of the material which Nature has provided for them at hand.

Now this is only a natural reaction. Social advancement is the need of the moment, and the peasants' interest is so completely concentrated on it that the old conditions of geography and climate are forgotten. This is not due, however, to conscious thought on the part of the peasants; it is due to a natural reaction given impetus by the progress that has taken place in transport and in manufacture of new materials since the beginning of the industrial revolution. They are an uneducated people who, once they have lost their

Above this doorway a balcony extends the whole length of the façade, and is protected by deep projecting eaves. The principal doorway is either arched or lintelled, the latter being the more usual. The lintel is to be found in quite an original form, consisting of two stones, one above the other, and decorated with religious symbols. The openings are small in order to protect the inhabitants from the cold. The jambs of these openings are either left plain or whitewashed.

As in all Spanish peasant houses, the kitchen is the centre of home life. It is usually square, sometimes circular; the entrance to it is always intercepted by a partition wall in the form of a screen which shields the fire from any draught. This is necessary when, as in the houses of this district, there is no recessed porch. The chimneys are constructed of stone and covered externally with a layer of tiles and surmounted by a whitewashed piece of wood which serves to keep the rain out. The disposition of the plan reveals the constant pre-occupation of the people to avoid the cold and to utilise the heat of the kitchen to best advantage.

old set of values, will not find new ones until they have attained their goal of social advancement and are sufficiently educated to understand the worth of their former work. Only then will they look to this work for fresh inspiration.



Fig. 24. A modern school in Torrelavega that carries on the peasant tradition

The drawings and photographs illustrating the essay are all by the author. It has been possible to include a small selection only of the many in the original essay.

EXHIBITION OF PHOTOGRAPHS OF PERSIAN ARCHITECTURE

OPENING OF THE EXHIBITION BY HIS EXCELLENCY THE IRANIAN MINISTER
ON TUESDAY, 9 JUNE

The Exhibition of Photographs of Persian Architecture organised by the American Institute for Persian Art and Archaeology was opened by His Excellency Hussein Ala, C.M.G., the Iranian Minister in London, on Tuesday afternoon, 9 June. Professor A. E. Richardson, A.R.A., Chairman of the Literature Standing Committee, was in the chair.

In introducing the Iranian Minister, Professor Richardson referred to the unavoidable absence of the President, for whom he was deputising, and expressed the Institute's pleasure in being able to lend their galleries for such an exhibition. He also said that he wished to convey to Professor Pope the esteem and admiration which was felt for him and his colleagues.

He referred to the long association of England and Iran, which goes back to the time of Queen Elizabeth. In the late seventeenth century Charles II knighted the Frenchman John Chardin who on his return from Persia settled in London in 1686. Was it not, he asked, James II who commanded Sir John's book describing his travels in Iran to be published in 1686, with the comment, "This book is to be printed?"

Professor Richardson spoke of the renaissance of Iranian Art in the early seventeenth century, when everything produced was of the best. He reminded his listeners of the debt Englishmen owed to Iran for so much of use and beauty (not forgetting sherry), and spoke of the various influences which had contributed to the development of Iranian art. He then called on the Iranian Minister to open the exhibition.

Before opening the exhibition His Excellency HUSSEIN ALA presented to Dr. Phyllis Ackerman the insignia of the Nichâné Elmi, 1st Class—the Order of Scientific Merit—which, he said, His Excellency the Iranian Minister of Education, Ali Asghar Hikmat, had just sent him for her as a mark of appreciation of the great services which she had rendered in making Iranian art better known abroad, and in particular in recognition of the brilliant part which she took in the Congress of Iranian Art at Leningrad last September.

Then, amid applause, His Excellency referred to Dr. Ackerman's work in partnership with her husband, Dr. Upham Pope, and spoke of her penetrating studies in the history of the textile art in Iran and her outstanding competence in the field of early Iranian iconography, and of her study of the history of Sassanian seals.

He continued: Having spoken of the gifted wife, I must say a few words about the no less gifted and

brilliant husband. This splendid collection of photographs is largely of his making. In fact, he is a pioneer in the field, and was the first orientalist from the West to obtain permission to enter the holy buildings of Iran, and to photograph details of architecture which had not until then been seen by occidental eyes and which were practically unknown to the world.

The permission to explore the most sacred monuments was, he said, of a revolutionary character, not merely for the history of Persian architecture, but in the acknowledgment by the Iranians of Persia's function in world culture and her obligation to contribute everything she could, even though it involved a reversal of tradition, to the knowledge of the history of art.

He referred to Professor Pope's visit to Teheran in 1925, and to the eloquence and warmth with which he addressed and charmed the leaders and the youth of his country, and how, with his contagious ardour, he impressed and stimulated them to appreciate more adequately the glories of their art, and of their contribution to the æsthetic and spiritual side of human endeavour. From his visit eleven years ago dated the series of successful measures taken by the new regime of Iran to safeguard ancient monuments and to encourage the renaissance of the arts and crafts.

His Excellency continued by saying: The results achieved speak volumes for the spirit of adventure, the scholarly patience and diplomatic skill of Dr. Pope. They are also a tribute, I think, to the energy and enlightened statesmanship of His Imperial Majesty Reza Shah Pahlevi, my august sovereign, who has within a decade lifted up his country from a state of backwardness and inertia to an enviable position of prosperity and stability. So often has zeal for reform and progress walked hand in hand with the severance of all links with the past and a clean sweep of ancient traditions that it is indeed a source of gratification to see in Reza Shah a defender of the faith in all that is fine in Iranian traditions, and at the same time a far-seeing monarch imbued with the most modern ideas.

His Imperial Majesty is an architect not only of the vast plans and structures of the political and social rebuilding of Iran, but also of the magnificent palaces and buildings with which he has endowed his capital. He has manifested a desire that the style of to-day shall be inspired by the best periods of Iranian architecture.

The Iranian Government, His Excellency stated, cordially welcomed the American Institute's work, and



*Above: Yazd, the city walls, east side. Probably early fourteenth century
Left: Nayin, Masjid-i-Jami, looking west from the minbar, circa 960. Both from photographs by Professor Pope*

were happy to assure it their support. The Government were actively pursuing the study of Iranian monuments, and were making appropriations for the conservation of buildings—appropriations the proportion of which to the total annual budget was not equalled, probably, by those of any other Government. He hoped that the exhibition would encourage many people to come to Iran.

His Excellency then referred to some of those who had helped Professor Pope, and whose photographs contributed to the exhibition: Baroness Ravensdale, who recently visited the country, following in the footsteps of her distinguished father, Lord Curzon; Mr. Robert Byron and Mr. Eric Schroeder. As the result of his researches, Dr. Pope, he said, had been enabled to propound convincingly the theory that the Gothic architecture of Western Europe is derived ultimately from the late Sassanian buildings of Iran.

In conclusion, His Excellency said it was their constant desire in the present as it had been in the past to collaborate with the West in the construction of the larger fabric of world brotherhood and peace. Then, thanking the President and Council of the R.I.B.A. for their kindness in allowing the use of their galleries, His Excellency declared the exhibition open.

PROFESSOR POPE, in proposing a vote of thanks to His Excellency, said: There could hardly be a more agreeable task than to propose a vote of thanks to His Excellency for having come to open this exhibition, which he has done with perfect grace and characteristic generosity; but that is one of the least reasons for which we have to thank him. It was due to His Excellency that the present Shah of Persia in 1925 first granted permission to enter an occupied mosque to a European scholar, and all the work that we have done since has been based upon Hussein Ala's quick and resolute understanding of the value of such an enterprise. We thank him for coming here to-day, and we thank him more profoundly for the great service he did in making possible a systematic investigation of the architecture of Persia.

Professor Pope then thanked the R.I.B.A., saying that it is an institution that has unrivalled prestige throughout the world; to have the welcome of such a body was for them an encouragement.

He continued by saying: We must also express on every appropriate occasion our gratitude to His Imperial Majesty the Shah for the decision which he took which threw open these noble monuments to investigation by Western scholars. It was a more serious matter than may appear. It is not easy for us to understand how deeply enshrined in the hearts of the people has been the sacredness of their mosques. It is with real sympathy that we must think of these people who for a time are thus deeply wounded, and it is with admiration for their good sense that we must watch their

attitude change from hostility to even welcome, as they find their mosques still standing, their religion unharmed, and the prestige of their civilisation enhanced throughout the world.

Professor Pope spoke of the exhibition as a sample of some 400 photographs out of three thousand five hundred, and as but black and white shadows, which could not convey the colour glory of the faience revetments and could only hint at the profound and moving impression that one received as one looked upward within some vast portal and felt the huge walls surging and soaring over him like a great tide of blue, breaking into a foam of flowers glittering with the liquid reflections from the facets of innumerable stalactites, with yet the whole majestic and calm by virtue of the grandeur of its proportions; the essential simplicity and the perfect rationale that underlies it all.

Professor Pope concluded by thanking the many members of the American Institute in Great Britain, including Lord Duveen, Sir Denison Ross, Sir Arnold Wilson, Sir Aurel Stein, Sir John Marshall, Baroness Ravensdale, Sir Percy Sykes, Mr. Laurence Binyon and others, whose good will and support had been so invaluable, and also his colleagues, Mr. Byron, Mr. Schroeder, Mr. Taylor and Baroness Ravensdale, and all who had aided their enterprise, and in particular His Excellency the Iranian Minister and the Royal Institute of British Architects.

SIR DENISON ROSS, C.I.E., Ph.D., in seconding the vote of thanks, spoke of the pleasure it always gave him to have the opportunity of paying a tribute to Persia, Persian art and Persian architecture.

He compared Persia to a haystack full of needles. You have to travel, he said, for hundreds of miles with nothing to look at but the bare hills, which in time you come to love but which offer no promise of anything; and then you suddenly come upon some building which stands up and looks you in the face. Unlike the ruins of Greece, which for the most part lie prone, one of the wonders of Muslim architecture is that even in ruins it still remains erect, and it seems that as long as one archway is standing you have the whole history of the people, of their religion, and of those patrons of the arts who were the great Kings of Persia.

In closing the meeting, the CHAIRMAN referred to the rarity of these examples of architecture, brought to light by patient research in Iran. He wished, he said, to say that never at any time in the history of architecture was there greater need for inspiration than at the present moment. It is generally conceded that Art needs revitalising at certain junctures. This is one of them. I can say, therefore, that if students profit by the wonderful research work of Professor Upham Pope his efforts will not be wasted.

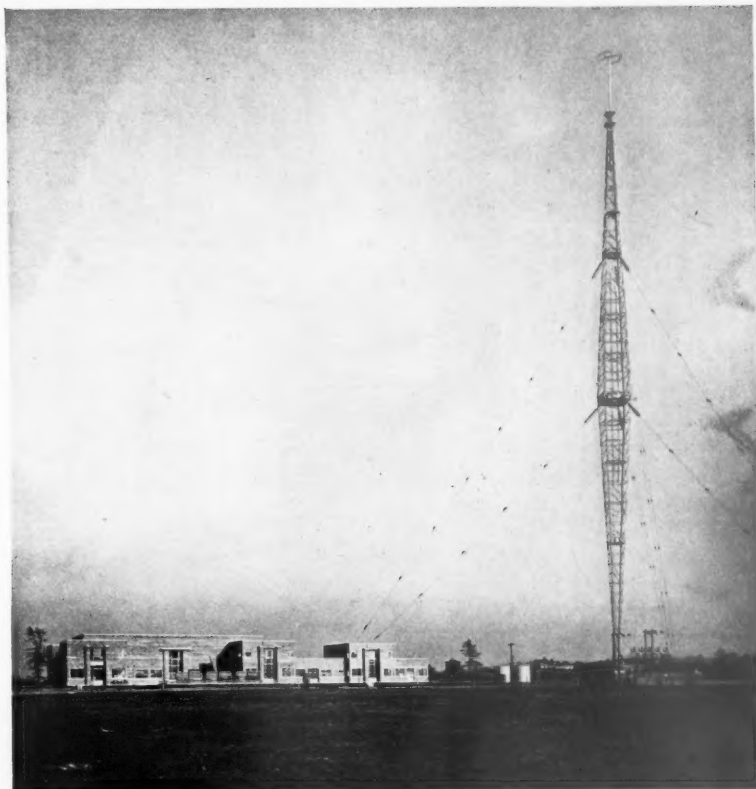
The vote of thanks was carried unanimously, with acclamation.

*A general view of Lisnagarvey (North Ireland)
Regional Broadcasting Station*

BRITISH REGIONAL BROAD- CASTING STATIONS

*Architects: Wimperis, Simpson and
Guthrie [FF.]*

*Civil Engineer: M. T. Tudsbury,
M.Inst.C.E.*



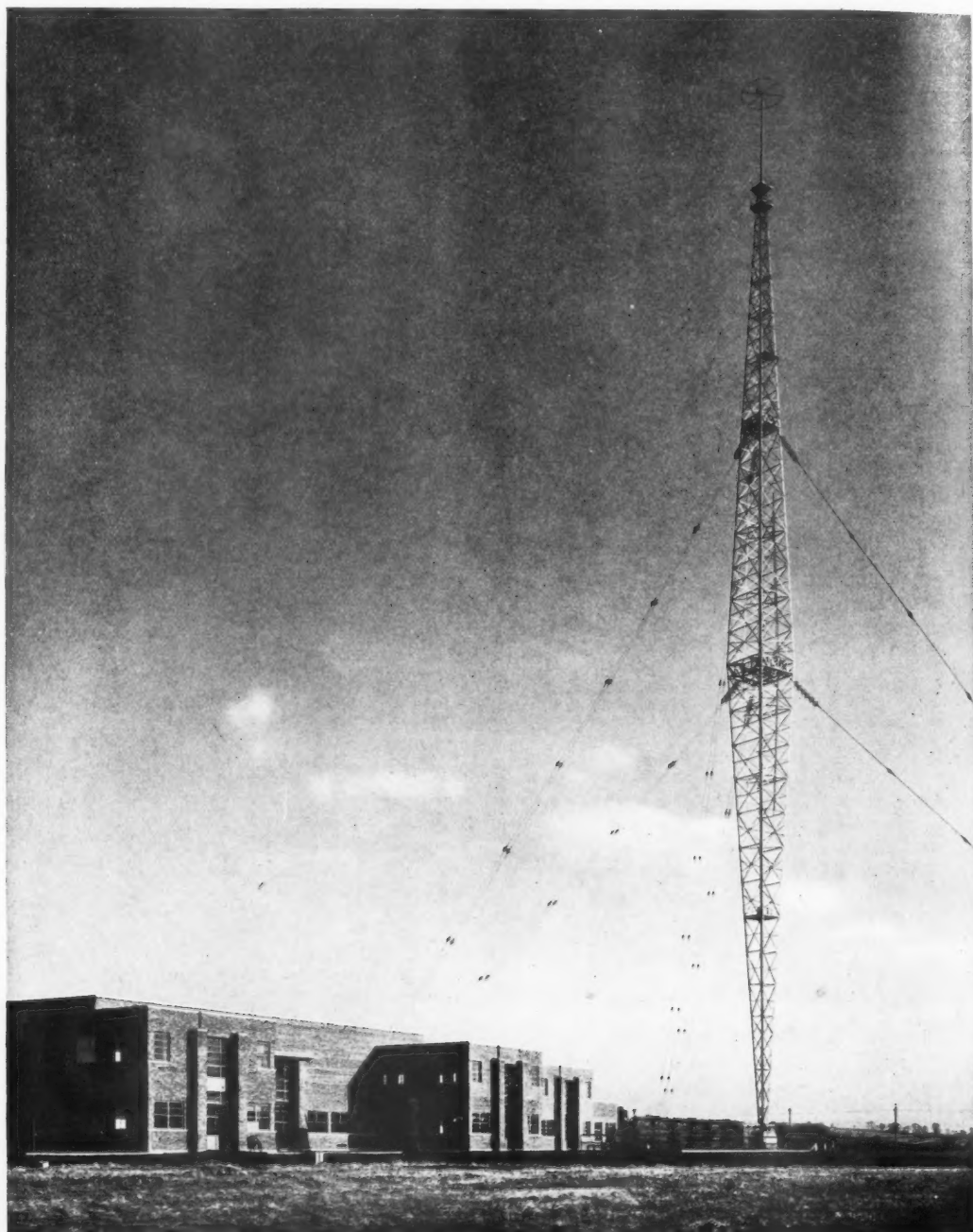
In 1930 the British Broadcasting Corporation put into service the first broadcasting station—at Brookman's Park, near London—of what was then a reorganised broadcast service. This was known as the Regional Scheme, and consisted of a number of stations, each containing two high-power transmitters, located so as to provide a uniform broadcast service over the whole of the United Kingdom. Thus two programmes, the National and Regional, were made available at sufficient strength for reception on inexpensive apparatus in all parts of the country.

Brookman's Park, which was itself based on the experimental transmitter at Daventry known as 5GB, became the prototype of the other stations. It has not been found necessary to vary either the planning or the general design of the buildings, though different facing materials have been used where harmony with surroundings and a local tradition demanded. This standardisation follows from the fact that it has not been found possible to improve the engineering layout, which is the dominant factor in the planning.

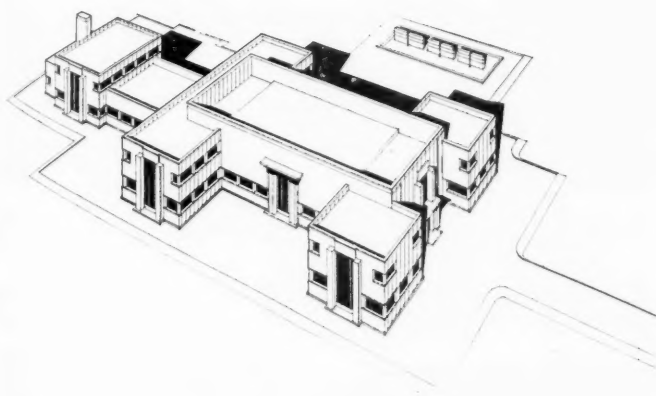
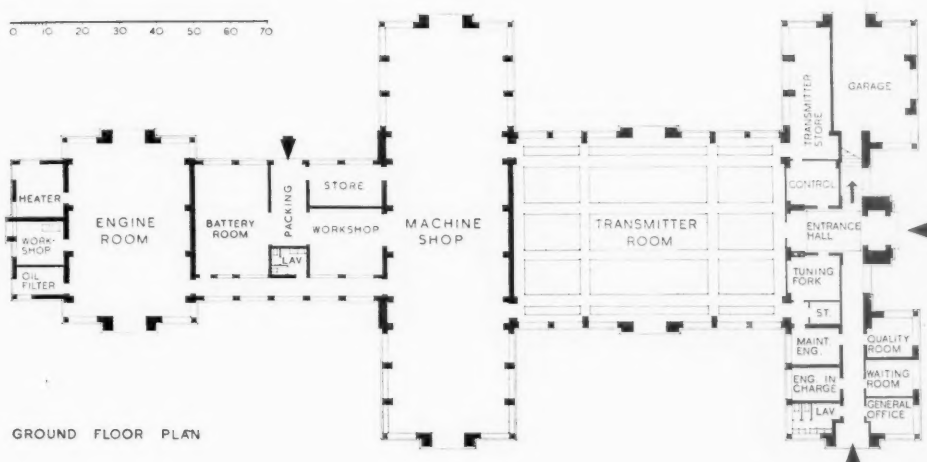
The architects were principally concerned with three

stations, namely, Brookman's Park (London), Burghead (North Scotland), and Lisnagarvey (North Ireland). Others have been erected to plans of the civil engineer on the lines originally worked out by the architects and himself.

The principal factors influencing the plan are as follows. An open site is always required to give, *inter alia*, space for the earthing system, which extends over a large area. There is therefore always abundant room for the building, which for this and other reasons is very largely of one floor. The position of the mast controls the placing of the building. The engineering layout is built up in a sequence from the Engine Room, which contains the direct current diesel engine generators, through the Battery Room to the Machine Room and thence to the Transmitter Hall. The machine room houses the motor generators, which convert the energy received to the various voltages required for feeding the transmitters. The transmitter hall is the "show" room of the building, and contains the two transmitters, facing each other and at right angles to the switchboard; in the middle of the hall are two transmitting tables. The last unit



Lisnagarvey Broadcasting Station is surfaced with facing brick



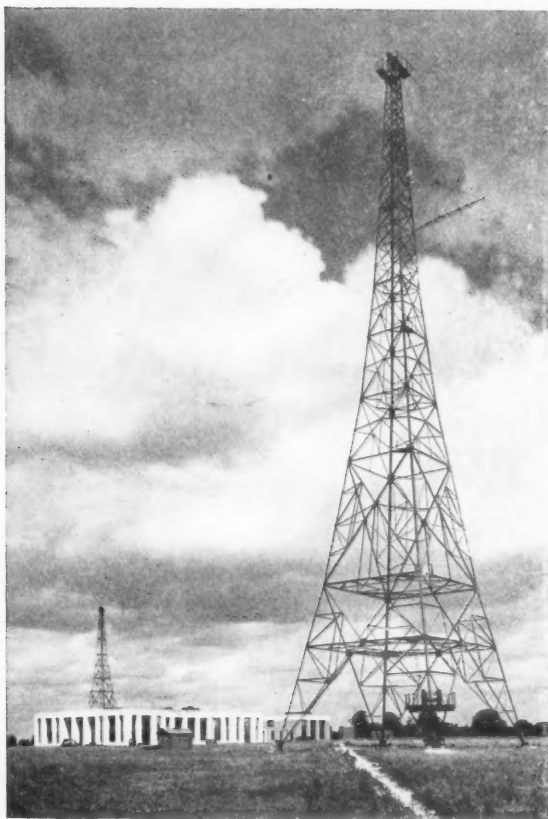
Typical plans and general form of the Regional Broadcasting Stations. The one illustrated is Lisnagarvey (North Ireland)

in the layout—at the front of the building—houses the control room, studio and offices, and is of two floors.

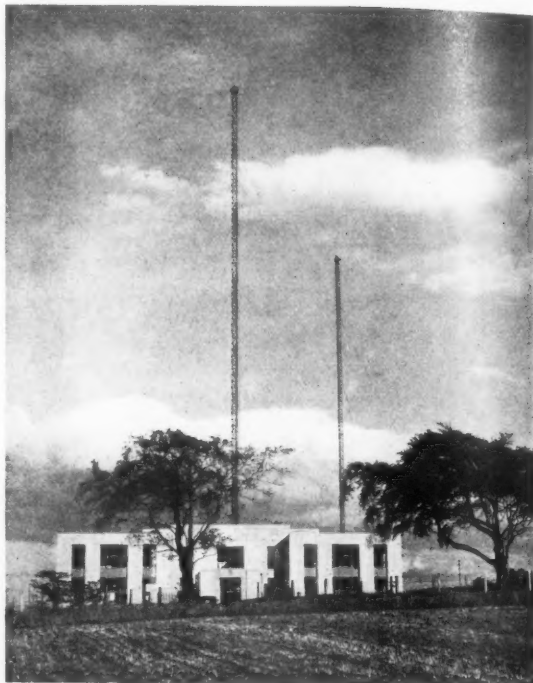
Extending under the Transmitter Hall is a basement space to contain the complicated network of wiring, the service pipes, the oil storage and the tanks of the valve-cooling system. The building is heated by radiators operated by oil-fired boilers or exhaust-gas heaters from the diesel engines.

Height (about 30 feet) is required in the engine room and machine room for overhead travelling cranes, to which the transmitter hall and office block generally conform. The necessity for abundant light demands large windows.

The structure is mainly of solid brick walling, faced with different materials according to locality. Stanchions are in most cases employed to support the tracks of the travelling cranes or to take the point loads from main roof beams where these are demanded by very wide spans.



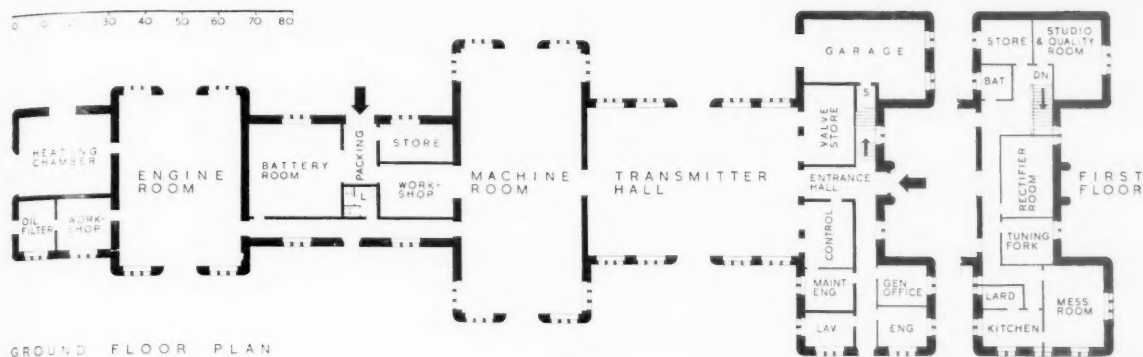
Brookman's Park (London Regional) Broadcasting Station



The Scottish Regional Broadcasting Station



The West Regional Broadcasting Station



The roof construction is of pre-cast reinforced concrete beams, specially chosen because they are rapidly placed and allow the installation of machinery to proceed without the hindrance and dirt which would result from the use of form work and casting *in situ*. The upper surfaces are finished with asphalt.

Portland stone was used for the external facing at

Brookman's Park, local stone at Burghead, and facing brick at Lisnagarvey.

The internal finish is simple. The walls, except in the office areas—which are plastered, are painted fair faced brickwork; the floors of the engine room and machine room are surfaced with quarry tiles and of the transmitter hall with cork.



Burghead (North Scottish Regional) Broadcasting Station is faced with local stone. Above is the plan which should be compared with that of Lisnagarvey Station

REVIEW OF CONSTRUCTION AND MATERIALS

This series is compiled from all sources contributing technical information of use to architects. These sources are principally the many research bodies, both official and industrial, individual experts and the R.I.B.A. Science Standing Committee. Every effort is made to ensure that the information given shall be as accurate and authoritative as possible. Questions are invited from readers on matters covered by this section; they should be addressed to the Technical Editor. The following are addresses and telephone numbers which are likely to be of use to those members seeking technical information. There are many other bodies dealing with specialised branches of research whose addresses can be obtained from the Technical Editor. We would remind readers that these bodies exist for the service of Architects and the Building Industry and are always pleased to answer enquiries.

The Director, The Building Research Station, Garston, Nr. Watford, Herts. Telegrams: "Research Phone Watford." Office hours, 9.30 to 5.30. Saturdays 9 to 12.30.

The Director, The Forest Products Research Laboratory, Princes Risborough, Bucks. Telephone: Princes Risborough 101. Telegrams: "Timberlab Princes Risborough." Office hours, 9.15 to 5.30. Saturdays 9.15 to 12.

The Director, The British Standards Institution, 28 Victoria Street, London, S.W.1. Telephone: Victoria 3127 and 3128. Telegrams: "Standards Sowest London." Office hours, 9.30 to 5. Saturdays 9.30 to 12.30.

The Technical Manager, The Building Centre Ltd., 158 New Bond Street, London, W.1. Telephone: Regent 2701, 2705. Office hours, 10 to 6. Saturdays 10 to 1.

THE PAINT RESEARCH STATION

On 19 May Mr. Ramsay MacDonald, as Lord President of the Council, opened extensions to the Paint Research Station at Teddington. The laboratories are under the control of the Research Association of British Paint, Colour and Varnish Manufacturers, and the Director is Dr. L. A. Jordan. The extensions include some new laboratories and a large reference library, and will make possible considerable expansion of an important section of the research work, that of the application and life of paints in relation to their backings. A joint body representing the Building Research Station and the Paint Research Station has been established to study this special problem.

The greater part of the week 19 May to 23 May was given up to functions connected with the opening of the extensions. There were visits by representatives of professional and trade bodies, including the R.I.B.A., and papers were given by experts on different subjects. On 20 May there was a discussion which was introduced by Mr. A. Andrews, F.R.S.A., F.I.B.D., who spoke on "Painters' Problems"; and by Mr. Alan E. Munby, M.A. [F.], who spoke on "Architects' Painting Problems." The following is a summary of Mr. Munby's speech.

Paint, though only a very small part of the matters in the hands of an architect, probably presents one of his major problems. It is a material constantly in evidence, usually decoratively applied, and owing to its continuous and often smooth and uniform surface, any defects in it are conspicuous. It may be best to say frankly that most architects know little about the composition of paints and their suitability for different purposes. Paint is largely a matter of chemistry as far as its personal attributes are concerned, and the architect has too many fields to admit of chemical studies. He may or may not specify a particular brand of paint, if he does he usually relies on the reputation of the maker to secure good material; if not, he may require "good lead colour," or go further, but he relies much on the integrity of his contractor. There are two problems in successful painting, one to get suitable materials containing only stable ingredients; the other to apply these materials to suitable surfaces in a condition to receive them. It is not very difficult to get good paints, and though very bad ones exist, a maker with a reputation to preserve

will generally put up only good material. Attempts are often made by traders to beat down his price, but it is a very foolish policy for a good firm to undertake the making of second-rate paint, and as the cost of application is about half the total cost it is evidently very poor policy for any property owner to use it. The first problem is then one of paying a reasonable price, and as far as the architect is concerned, not accepting a painting schedule at prices which obviously invite bad material, and dealing only with a firm whose experience and integrity can be called upon as to the best material for a specific purpose should such advice be needed.

Many years ago I was a member of a Home Office Committee on the use of white lead, and though its prohibition was the main aim, we had to admit that no other paint excelled it for external work; but the relative protection of different paints is too large a subject on which to embark.

It may be said that all an architect or other paint user has to do now to secure a good paint (anyhow, the common straight paint) is to cite a British Standard Specification, but let him be careful. The B.S.I. specifies several grades and qualities, a procedure open to a difference of opinion, moreover. Many tests are referred to "an agreed sample" which may leave certain qualities "in the air" until prices have been accepted.

The relation between the paint, the surface and its condition is a more difficult matter, because we know very little about it, and that is why this Paint Application Panel has been set up. Experts on a particular paint know little or nothing of its effect on specific surfaces. I speak with experience, often paying an expert's fee, obtaining excellent material and work, and being faced with complete failure. Given good paint, failure is generally due either to sealing up water in the material covered or to some chemical action between the paint and the material. It is almost true to say that every chemical action requires moisture, hence the drier the material on which the paint is laid, the less the chance of chemical failure. It should be obvious that if a material (not merely a surface) contains more moisture than the surrounding air, it will in time dry out, and if

it is coated both sides by an oil paint this covering must be broken in the process of moisture escape. Some partition blocks absorb almost their own weight of water, but when plastered may appear dry. To paint both sides of such a partition too soon must inevitably lead to trouble. We have got as far as moisture content for timber, and we should now have this decided for decorations on the plaster face of porous materials made from brick earths. It is no use sealing up water with patent preparations prior to painting.

As to chemical reactions, we know next to nothing, and often not even the composition of our materials; for example, Keene's cement is sometimes alkaline and sometimes acid, but the makers do not help us at all. The term Keene's cement should be made illegal. Before these problems can be solved the chemical composition of all the bodies concerned must evidently be ascertained, when their reaction can be studied. This implies much greater uniformity in the products of the manufacturers of plastic materials to which paint is applied than exists at present. There are of course also certain physical failures of paint due to strain resulting from differences of expansion, but when paint is applied to a stable surface these usually originate in the paint itself.

ACOUSTICAL TERMS

A British Standard Glossary of Acoustical Terms and Definitions* has now been issued after two years' discussion and argument between the greatest authorities in things acoustical in this country. It is essentially a scientific document in which most architects will find little of interest or even of understanding. Even so, its publication marks a step forward which is of vital importance to architects. To escape from "professional negligence" the architect nowadays must train scientifically as well as aesthetically, and this glossary heralds yet another development in building about which the architect will have to make himself acquainted. Satisfactory methods of measuring noise have now been evolved. Enactments against noise will be stultified unless the competent authority, whether it be architect or central body, is provided not only with the means of measurement but also with fundamental units and standards of measurement. These immediate requirements have been greatly clarified and facilitated by the publication of this acoustical glossary, which, *inter alia*, proposes that the loudness of a sound or noise shall in future be expressed in phons (B.S.) to be realised in accordance with the definition laid down, and that, for better understanding, the use of the decibel shall be restricted to intensity measurements. The phon is approximately the smallest change of loudness which the ear can detect in the case of sounds of medium frequency and loudness. The British Standards Institution is continuing to give the whole question close study, and hopes presently to report in greater detail on the development of standard methods of measurement of sound and noise. It is interesting and important to note that international co-operation has been obtained in the compilation of this glossary. ALISTER G. MACDONALD.

DESTRUCTION OF BED-BUGS

The Minister of Health has issued a circular (Circular 1544) to local authorities stating that he considers it undesirable that orthodichlorbenzene should be used for disinfecting inhabited

* *British Standard Glossary of Acoustical Terms and Definitions* No. 661. 1936. The British Standards Institution. 3s. 6d. net.

houses from bed-bugs pending further scientific inquiry into the question of its possible toxicity.

"Since the issue of the 'Memorandum on the Bed-bug and How to Deal with It' (Memo. 180 Med.) further investigations have been carried out with undiluted and diluted orthodichlorbenzene. Whilst satisfactory results have been obtained as far as the destruction of bed-bugs is concerned, it has been found in practice that it is difficult to take adequate precautions against the fumes, and the period which is necessary for proper ventilation is so long as to render the method impracticable for use in occupied premises. The toxicity of the fumes to human beings is not known at present, but experiments on animals have indicated that they may be toxic in low concentrations. Pending further inquiry, the Minister considers it undesirable that orthodichlorbenzene, whether in an undiluted or a diluted form, should be used for the disinfection of inhabited houses."

CHEMISTRY OF CEMENT

That Portland cement deteriorates under storage conditions that expose it to the air has long been known. As part of their general research work on cement the Building Research Station have conducted a lengthy series of tests on the effects of exposing cements to the action of carbon dioxide, the results of which have now been published in a technical paper.*

Technical papers are not written for the information of architects and the building industry, but for that of scientific research workers and chemists, in this case cement chemists. Moreover, the problem of extending the life of unused cements is mainly one for the manufacturer. There is therefore little to be gained by giving here any detailed description—necessarily abstruse and involved—of the work. Briefly it was concerned with finding out what happens to cement when exposed to carbon dioxide chemically, and as regards strength and setting times. It represents a stage in a general line of research aimed at improving the storage capabilities of cement.

BENDING WOOD

The practice of bending wood has only a small field of application in joinery and even in furniture-making, compared with that in boat-building. Nevertheless, it has design possibilities that should not be neglected by architects. Its employment should be increased by the publication† of some recent research work and the invention of a new bending machine by the Forest Products Research Laboratory. The machine, which has been designed and built at the Laboratory, is capable of commercial use. It has the following advantages: (1) A number of bends can be made rapidly and simultaneously; (2) end-pressures can be controlled, so that breakages and losses are reduced to a minimum; (3) bends of 360 deg. and over, eccentric bends and bends in two planes can be produced on the one machine.

A useful volume of data has been obtained from the use of the machine at the laboratory. Various woods have been tested, steaming times investigated and the action of bending on the wood structure examined microscopically. To those interested in wood, its properties and possibilities, Record No. 10 is interesting reading.

* *The Carbonation of Unhydrated Portland Cement*. Building Research Technical Paper No. 19. By D. G. R. Bonnell, M.Sc., Ph.D. H.M. Stationery Office. 1s.

† *The Practice of Bending Wood*. Forest Products Research Record No. 10. H.M. Stationery Office. 6d.

Book Reviews

HELLENISTIC ARCHITECTURE*

The fervent light which was focused on ancient Greece in the nineteen hundreds, and which threw into such high relief the golden achievements of the fifth century B.C., has grown in strength and in extent. It was soon to light on the age of Homer, and spread over the pre-Homeric culture that flourished in Crete. It showed up in shadowy form the buildings in Sicily and on the mainland that were predecessors to the Parthenon, and illuminated in greater profusion of detail the temples and the theatres that succeeded it. It then began to penetrate the dark centuries lying between the classic and the Homeric ages, and is now reaching out into the obscurity of prehistory.

Monuments already famous in the last century are to-day the subjects of a more intensive and scientific research. They are studied rather for the part they play as links in a historic chain, than as isolated examples of the Greek genius. Meanwhile, the focus of interest, as far as exploration is concerned, has shifted on one side to the archaic field and on the other to the more distant centres in Asia Minor, Syria, Palestine, and the Further East, where Greek architecture flowered late and luxuriantly. It is the latter period which forms the subject of Mr. Fyfe's book.

Eighty years ago, C. R. Cockerell loaded his provisions and his sketching apparatus on muleback, and toiled up Mount Cotilius to take measurements of the Temple of Apollo. After much labour he returned, bearing with him drawings of the famous "Bassae capitals," and of that remarkable Corinthian column which was to have such numerous and such opulent descendants. It is roughly from this beginning that Mr. Fyfe commenced his research, following the trail eastwards to Miletus and Belevi, Baalbek and Palmyra, and wherever else the Corinthian columns led. And the difference in outlook between Cockerell's time and his own is reflected in the substitution of camera and automobile for the sketching blocks and mules.

In a survey such as his a great deal of ground has to be covered; and most of it is far from easy. Hellenistic architecture, though historically defined, is stylistically almost boundless; and it is with the stylistic aspect that Mr. Fyfe is chiefly concerned. This means that not only has he to range over a vast amount of territory, from Italy to Iraq and from Thrace to Egypt, but he continually meets with the difficulty of having to enumerate and define the various qualities which

create the style he is discussing, and distinguish it from others. Some of these qualities are those belonging to what may be called the spirit of the time; others belong to a phase recurrent throughout the whole of architectural history. It is remarkable how closely the spirit of Hellenistic architecture resembles that of late Roman work, of the Baroque, of the Directoire period in France and the Regency in England; a resemblance that goes far beyond mere detail and decoration. Purely as a style, therefore, it is almost impossible to define with precision. But the author, exercising an author's privilege, does not expose the real difficulty of his problem until the very last paragraph. There he says of Hellenistic architecture that—

"it cannot be considered as a style like Greek or Roman, by which terms we understand certain definite things; but it is an inseparable part of the classic principle which is greater than either of these separately. . . . The building contribution of the Hellenistic monarchies was part of the continuous stream which began with archaic Greece and which vitalised Rome. . . . What can truly be called 'classic' in architecture is, I believe, just as present to-day as it was in Hellenistic times."

With that the text comes to an end, and except for some interesting plates and an appendix, the book is thus concluded.

To do justice to the work as a whole, this final chapter should be read with the introduction. Otherwise the earlier chapters with their mass of comparative data may confound all but the enthusiast at the outset. It must be confessed that one student at least was dismayed by their prolixity, by their glancing and familiar references to distant sites of whose existence he was only dimly aware, and by the constant assumption that his knowledge of the antecedents of Hellenism was as extensive as the author's.

Once accomplished, however, and the details fitted into place, certain general impressions are formed in the reader's mind. One is made to realise, for instance, the great geographical extent of Greek influence, and the amazing impetus that carried it forward, even at the most distant remove from the time and place of its greatness. One is filled with interest and curiosity by the descriptions of the Temple of Bel at Palmyra and the colonnaded streets, the strange "grave-towers," the Pharos at Alexandria, and the fine theatres in the cities of Asia Minor. One is introduced to the earliest "baroque." The love of the dramatic, the axial planning, the dynamic use of statuary, the profuse Corinthian columns and pilasters; the easy lavish

**Hellenistic Architecture*, by Theodore Fyfe. La 8o. xxxii + 248 pp. + 29 plates. Cambridge University Press. 1936. 2 1s.

ornament, the slight exaggeration in size and contrast—all these things can be recognised in late renaissance architecture sixteen centuries later. The comparison is carried a stage further by the corresponding unobtrusive skill in engineering which made these great monuments possible. The siting of Pergamum, the main streets of Jerash and Palmyra, the Alexandrian Pharos, and the theatre at Priene, were all products of a high constructive skill.

Another kindred science which developed in this period was the laying out of towns; and the chapters in this book dealing with Civic Design and the House are probably the most interesting of all. It seems that with the purely architectural tradition in graceful decline, related questions of building organisation, hygiene, finance, and domestic comfort, receive greater attention. Mr. Fyfe makes extensive claims for Hellenistic architecture and town-planning, and there are some, no doubt, who will wish to contend them. But it is worth pointing out that these claims exist; and if for no other reason than that he is among the first to do so, Mr. Fyfe's work is bound to draw the attention of everyone interested in Greek architecture, of whatever period. The book is the outcome of a tour undertaken in accordance with the terms of the Henry Florence Bursary of the R.I.B.A. It is a compendium to the author and to the Institute that it has been so handsomely produced by the Cambridge University Press.

W. G. H.

A NEW SHORT HISTORY OF ARCHITECTURE

A KEY TO ENGLISH ARCHITECTURE, by T. D. Atkinson. 80. x + 214 pp. + 16 plates. London: Blackie, 1936. 5s.

It is always interesting to architects, and encouraging, to find a publisher of popular books including an architectural history in a series of books dealing with a variety of subjects from plant life to the stars. Publishers do not, presumably, lack common sense in their interpretation of what the public wants, so that we can conclude that they do now want a key to the history of English architecture at a time when other evidence might be taken to show that the general interest in factual history is dying down.

Mr. Atkinson has certainly provided his readers with a magnificent five shillings worth of information. The obvious criticism of the book, which it is unnecessary to labour, is that it goes no way beyond the giving of information, coherent and accurate though it may be. It can be doubted now whether information about stylistic changes in detail and plan can excite the interest in architecture which the public is hungry to have stimulated; particularly when the conclusion of the author is as it were a shrug of the shoulders—all this is what was. The future? Who knows?

That is not unnaturally the conclusion of a generation fed on the history of the styles and on biographies of the great architects whose names and works stand out and must receive the major share of attention in a history of this type.

Mr. Atkinson starts his history with Ancient Rome, giving a direct account of the Roman adaptation of Greek architectural forms and their contribution, directing the whole of his story so as to show the influence of Roman plans on the subsequent development of church architecture in Western Europe, and secondly to provide a basis for the understanding of Renaissance architecture. In this and in all chapters he deals succinctly with the constructional methods used. The second chapter is on Early Christian churches, the third on Byzantine and

Romanesque. These three chapters are preliminary to his later chapters, in which he deals only, except for occasional references to continental architecture, with English buildings. From chapter four on Saxon architecture he passes in strict chronology through the centuries, describing the methods of building, illustrating his descriptions by reference to a wide range of monuments. The price of the book clearly prevented full illustration by drawings and photographs, though there are twenty-seven photographs and many small and some large line drawings. The book would have gained enormously by the inclusion of many more, though this would have raised the price, and by the improvement of some. The first drawing, for instance, of the Doric order (The Temple of Theseus) is so cruel as a representation of the quality of Greek detail that an entirely false idea is given. Without more illustration some of the descriptions of plans must prove difficult for anyone to understand who does not already know a fair amount about the subject.

The later chapters consist for the most part of good short descriptions of particular monuments grouped under their architects and relieved by the author's comments, which are easily, and generally aptly, conveyed by the insertion of critical epithets. The final chapter carries the story up to the present day, though Mr. Atkinson avoids more than the barest reference to what is properly modern building and leaves his history with a reference to the now outworn discussion of shop windows and columnar architecture in a way that might leave his readers to believe that this was still an unsolved problem.

A HISTORY OF RELIGIOUS ARCHITECTURE

A HISTORY OF RELIGIOUS ARCHITECTURE, by Ernest H. Short. Large 8vo., xix + 304 pp. + 65 plates. London: Philip Allan, 1936. 12s. 6d.

A book which covers the whole history of religious architecture in three hundred pages must be judged by the success with which it avoids the pitfalls such an undertaking invites. It must necessarily be a re-statement of much accepted knowledge, condensing it into a form that gives the essentials but omits what is secondary. The reader will turn to it for information and expect of it accuracy. But, such is the vastness of the subject, concentration may languish long before the end is reached. The reader will therefore demand in an exceptional degree that his interest shall be sustained and continuance of his attention stimulated. Again the picture must be a clear one. There must be proportion between the parts and avoidance of the temptation to show partiality by stressing one unduly. The reader must take away with him a balanced view.

On the whole, examined by these criteria, this book may be said to succeed. It is a work for the non-professional student, and the treatment of the subject is rightly adapted to render historical analysis readable. The summaries of each period are capably done, and give a just presentation of the main facts. A leaven of picturesque incidents of history, aptly introduced and well told, imparts human interest and enlivens the writing. To an extent that is rare among books of this kind, the result is genuinely informative and interesting.

If a true balance between the parts is not so conspicuous, something must be allowed for the fact that a book in English for English readers may reasonably allot to English architecture special attention. The least satisfactory feature is the last

chapter, in which the story is brought sufficiently up to date to include New York Cathedral and the two at Liverpool. The author gives the impression of being on surer ground when he can rely on established authorities such as the historical styles afford. The section on recent architecture is sketchy and not always accurate. Pearson, for example, did not design Truro "in imitation of Lincoln," and Garner's work at Downside is not "in the Early English style." Similar errors could be mentioned and the author's references to recent history are in general the least happy feature of this book.

S. E. DYKES BOWER [A.]

THE S.P.A.B. BRIDGE SURVEY

THE ANCIENT BRIDGES OF WALES AND WESTERN ENGLAND, by E. Jervoise. 8vo. xii + 180 pp. + plates. Published for S.P.A.B. by Architectural Press. 1936. 6s. 6d.

This is the fourth and last of Mr. Jervoise's delightful series on this subject written on behalf of the S.P.A.B., and gives us the full results of his most painstaking work.

The author treats his subject systematically, dividing the volume into nine chapters, each dealing with a specific river or rivers and districts, and he provides his readers with ample historical information, illustrated by ninety clear and interesting views. The full history and craftsmanship of each example are accurately recalled, and the old inscription, dates, and financial particulars make interesting reading. Mr. Jervoise gives us definite facts and states clearly whenever doubt exists on any point of history, construction or chronology. The book clearly reveals times, and examples of those times when the fusion of Architecture and Engineering was spontaneous, being truly created by circumstance, locality, materials, and fitness of purpose. The comments of travellers that during the past have used these water crossings, the description of local writers and historians, and the very human stories of disaster, triumph and local pride are faithfully recorded. The value of the work is enhanced by the fact that the author gives a fair share of his attention to the smaller, but none the less beautiful bridges. The reader, however well travelled, will be impressed by the variety of examples, and their careful handling. One is glad to know that the Society of Antiquaries is to take charge of the valuable notes and manuscript of the four books.

With this latest volume, an ordnance map, and a car, the antiquary, architect and tourist will have an enjoyable and instructive time. There is an excellent index and the book is well produced, packed with information and of a convenient size.

PHILIP S. HUDSON [A.]

GRAND TOUR

GRAND TOUR. A Journey in the Tracks of the Age of Aristocracy. Edited by R. S. Lambert. Faber & Faber. 1935. 10s. 6d.

This book has little direct bearing on architecture, much less, in fact, than might have been expected, but its pages evoke the life of the cosmopolitan patrician society of the 18th century and the uniformity of architectural style from St. Petersburg to Vienna and to Dublin becomes understandable.

The railway killed the Grand Tour, not the Napoleonic Wars or the resulting unsettlement of Europe. Mere physical

difficulties would doubtless have been overcome, but the locomotive engine brought not only cheap travel, but a new outlook. In 1841 the last edition of Eustase's *Classical Tour* was published, but the same year saw the issue of the first number of the *Ecclesiologist* the organ of the Cambridge Camden Society, and in its pages we can watch the growth of an increasing appreciation of the beauties of our own land. Early numbers urge members to visit churches in the vicinity of Cambridge, but gradually, and concurrently with the spread of the web of railway track, venturesome individuals reach more distant points, and begin to write of their discoveries at Hexham and St. Buryan in the manner of explorers.

Fired by the re-discovery of England, more and more people turned their attention inland instead of overseas, and in 1843 Pugin published his *Apology for the Revival of Christian Architecture in England*, with the striking passage which ultimately became the basis of the Institute's Pugin Studentship, "I would also have travelling students, but I would circumscribe their limits. Durham the destination of some, Lincolnshire's steeped fens for others, Northampton spires, and Yorkshire's venerable piles, Suffolk and Norfolk's coasts, Oxford, Devonshire, and Warwick, each county should be indeed a school—for each is a school—where those who run may read, and where volumes of ancient art lie open for all inquirers."

This was revolutionary. It is impossible to imagine the leaders of the profession of that day, men such as Smirke, Nash, or Soane, responding to such an insular appeal. Even Sir Charles Barry, with whom Pugin's life was to be so closely linked, had spent four years on the Grand Tour. A whole generation was to pass before foreign travel was to influence English architecture again, and then the tradition was definitely broken, and the resulting importations from France, Spain, and Germany served not to build up a supra-national architectural style, but chaos.

The book is excellently produced and illustrated, and to those who have the historic sense, highly to be commended.

W. W. BEGLEY [L.]

UNIVERSITY BUILDING

UNIVERSITY GRANTS COMMITTEE. REPORT FOR . . . 1929-30 TO 1934-35. 84 pp. H.M.S.O. 1936. 4s.

The last report of the University Grants Committee, which has just been published, contains a chapter of downright statement that the "housing problem" in universities is one of their greatest financial needs. There are too many departments working in quarters hopelessly out of date, often built for completely different purpose to those for which they are now being used, temporary buildings have often been made to serve as permanent, and central buildings in cities where proper regard should be paid to the beauty of architecture and the convenience of good civic planning are "ugly, inconvenient, congested, and in some cases possibly even dangerous." "In our recent visits to the various Universities," say the Committee, "... we were painfully impressed by the high proportion of their accommodation which is not merely undignified, but frankly sordid, besides being congested and inadequate." The criticism of the work buildings also applies to the residential buildings; "there is a keen sense of dissatisfaction with the housing conditions . . . we could wish this sense were even keener."

After criticism, the Committee gives good advice. "Their own experience ought to make it certain that University authorities will not only take advantage of the best architectural advice and talent, but will also see to it that in respect both of site and structure any new buildings are planned in such a way that the next generation will not be embarrassed by lack of foresight, of reasonable regard for outward appearance, and of thought for future adaptability.

The report states that in six years about £5,040,000 has been spent on building and the purchase of land and property. These years have been the greatest building years in the history of British Universities. We hope that, with the incentive provided by this report, in the future there will be even more money to spend, and that it will be spent in the spirit of the Committee's recommendations.

PLANNING LITERATURE

BIBLIOGRAPHY OF PLANNING, 1928-1935. A supplement to the *Manual of Planning Information, 1928*, by Katherine McNamara. 40. x + 232 pp. Cambridge, Mass.: Harvard Univ. Press.

This is a valuable addition to planning literature, which will be welcomed by the increasing number of people who are concerned with planning, and have need to wade through the morass of books and periodicals dealing with the subject. As a publication in the Harvard City Planning Series, it will immediately command respect. The previous nine volumes in that series have all been notable contributions to knowledge, many of them being studies of exact departments of planning information that are properly the subject of university research, and which cannot in the ordinary course of things be shouldered by commercial publishing houses. This book is of that kind.

This work continues the survey of literature up to 1928 made by Katherine McNamara and Theodora Kimball Hubbard in the *Manual of Planning Information*, and consequently deals only with publications that appeared from 1928 to 1935. Naturally, perhaps, the emphasis is on American literature, but the literature, particularly the books, of other countries, is, on the whole, fairly represented. A good deal of value from Great Britain has been missed owing to the restriction of the periodicals indexed to the R.I.B.A. JOURNAL and three journals which are solely concerned with planning, namely the *T.P.I. Journal*, the *Town Planning Review*, and *Town and Country Planning*. Any bibliography of the scale of this should include the *Architects' Journal's* special slum clearance numbers, and papers that have been published in such as the *Chartered Surveyors' Institute Journal*, the *Journal of the Royal Sanitary Institute*, and above all, the invaluable publications issued by Mr. Martin for the National Housing and Town Planning Council. Another omission, in its way more serious than the absence of any relatively ephemeral journal articles, is the omission of English Regional or Civic Surveys. These are the groundworks of planning in this country and are essential to a full study of our work.

No form of classification is so clear that it will not muddle anyone. Miss MacNamara's system follows that adopted in the *Manual of 1923* which was previously used in Pray and Kimball's *City Planning Analysis*. It does not conform to any of the systems accepted internationally, but is reasonably clear.

ARCHITECTURAL DATA

ARCHITECTURAL GRAPHIC STANDARDS, by C. G. Ramsey and H. R. Sleeper. 2nd Ed. 4to. xii + 284 pp. New York: John Wiley. London: Chapman & Hall. 1936. 30s.

In recent years more and more architects have become aware that their own experience cannot suffice to carry them successfully through practice. There are, perhaps, a few large firms whose range of work is so great and who have established systems for collating their experience, who can dare to carry on without continual reference to other people's methods. If such firms exist, they are living in a very insecure paradise; the vast majority of the profession is forced to accept every opportunity to widen knowledge beyond the limits of its own experience. To meet this growing demand for knowledge, many journals now publish "information sheets" and articles on planning, etc., and there have appeared in the last few years several books consisting entirely of collected facts. Of these perhaps the best is Ramsey and Sleeper's *Architectural Graphic Standards*, a second edition of which has now been published.

When this book was first reviewed in these columns in 1932, it was described as "an invaluable companion to the conscientious planner." The new edition with fifty more plates dealing with subjects such as air conditioning, insulation and the mechanical trades is even more useful than the first. Since it is an American book, some of the information, particularly that relating to proprietary articles which cannot easily be obtained in this country, and to methods of construction controlled by American building law, is of minor interest only to English architects, but by far the greater part is of general reference and valuable to all architects wherever they may be.

The title may be a good one to American ideas, but it seems inadequate to us with its emphasis on "graphic standards" which seems to imply that it is merely a draughtsman's handbook. It is much more. A draughtsman has much to get from it in advice as to methods of representing items in a drawing, but the book's essential value is to constructors and planners. The construction data is naturally most affected by American methods and proprietary materials, but an architect who uses it with discretion need not go far wrong. The planning data consists of information about sizes of things, seating in theatres, restaurants, schools, etc., library shelves, kitchen cabinets, sports grounds (including games hitherto unknown in England, Roque, Boccie, paddle-tennis and horseshoe-pitching!), domestic room minimums, stables, etc., etc. In fact, it is difficult to name any serious omissions while it would be easy to name many things in this book which can be found no where else so easily.

An excellent index of almost four thousand references concludes the volume.

BUILDING COMMODITIES

ARCHITECTS' STANDARD CATALOGUE, 1936-1938. London: Standard Catalogue Co. 1936. 5 gns.

The 8th edition of the *Architects' Standard Catalogue* has been issued in a single large volume this year instead of four volumes, as formerly. The publishers state that this has been done in order to simplify reference, and it is certain to do so. The sections are clearly marked by strong projecting tabs, and a handy short index is provided on an ivory bookmark. The volume is strongly and attractively bound so that there need be no fear that it will fall to bits.

Review of Periodicals

Attempt is made in this review to refer to the more important articles in all the journals received by the Library. None of the journals mentioned are in the Loan Library, but the Librarian will be pleased to give information about prices and where each journal can be obtained. Members can have photostat copies of particular articles made at their own cost on application to the Librarian.

SCHOOLS AND UNIVERSITIES

ARCHITECTURAL REVIEW. Vol. LXXIX. No. 475. June. P. 275.

Boarding school for about 100 boys, Preston Park, Brighton, by A. V. Pilichowski. Reinforced concrete and welded steel.

MONATSHEFTE F. BAUKUNST U. STÄDTEBAU. Vol. XXXI. No. 6. June. P. 225.

Rome University. Description by Prof. Luigi Lenzi of this great scheme, includes buildings by Piacentini, Capponi, Ponti, Foschini, etc.

L'ARCHITECTURE D'AUJOURD'HUI. Vol. VII. No. 5. May. Schools. Excellent descriptions and illustrations of over twenty schools of all types, infant, junior and senior, mostly in France. An important reference. A copy of this number is being added to Loan Library.

ARCHITECTURAL FORUM. Vol. LXIV. No. 6. P. 461.

Long Beach Polytechnic High School, California, by H. R. Davies. Perhaps most modern group of school buildings in U.S.A. for technical, art, physical and manual training. Construction-planning detail particularly interesting.

BAUGILDE (BERLIN). Vol. XVIII. No. 17. 15 June. P. 473.

Scheme for Volksschule, Gerlingen, by K. Gonser.

KENTIKIE SEKAI (TOKYO). Vol. XXX. No. 4. April. P. 1.

Nippon Middle School, Tokyo. A large State school on modern European lines, by K. Imai.

ARCHITECTURE ILLUSTRATED. 1936. June. P. 196.

Page Street, Mill Hill, Secondary School for Middlesex County Council, by W. T. Curtis [F.] and H. W. Burchett [A.]. Senior School, Headington, Oxford, by H. F. Hurcombe [L.]. Whittingehame College, Brighton, a modern private school, by A. V. Pilichowski [A.].

CIVIC BUILDINGS

BUILDER. Vol. CL. No. 4870. 5 June. P. 1118.

Beaconsfield U.D.C. Offices by Burges, Holden & Watson (C. H. Watson [L.] and A. A. Stewart [A.]).

SWIMMING BATHS

BAUMEISTER. Vol. XXXIV. No. 6. June. P. 181.

Open-air and indoor swimming baths at Pirmasens by Härter. The indoor bath about 90 ft. by 60 ft., with gallery restaurant overlooking bath; building also includes slipper baths.

OFFICES

CONSTRUCTION MODERNE (PARIS). Vol. LI. No. 34. 24 May. P. 690.

"Vienne-Rocher," large block of offices for letting, by Urbain Cassan, allowing great variations in planning partitions of separate suites.

SHOPS

ARCHITECTURAL REVIEW. Vol. LXXIX. No. 475. June. P. 269.

Illustrations of three recent London shops. Peter Jones, Sloane Square, by Slater and Moberly [FF.] with C. H. Reilly [F.] and W. Crabtree [A.]; Simpsons, Piccadilly, by J. Emberton [F.], and shop at Golders Green by E. Goldfinger with R. Jensen.

BUILDER. Vol. CL. No. 4870. 5 June. P. 1124.

ARCHITECT AND BUILDING NEWS. Vol. CXLVI. No. 3520. 5 June. P. 277.

John Barnes & Co., departmental store, Finchley Road, by T. P. Bennett [F.] and Son, with flats over.

DESIGN AND CONSTRUCTION. Vol. VI. No. 8. June. P. 269. Shoe shops for Messrs. Russell & Bromley at Tunbridge Wells, Ealing and Ilford, by C. Entwistle.

BOUWKUNDIG WEEKBLAD ARCHITECTURA (AMSTERDAM). 1936. No. 24. P. 262.

"Schunck" building, Haarlem, by F. P. J. Peutz. A large concrete mushroom construction and glass departmental store.

AERODROMES

SOUTH AFRICAN ARCHITECTURAL RECORD. 1936. March. P. 71.

Proposed sea-plane base, Cape Town. Described and illustrated by block plan.

CONSTRUCTION MODERNE (PARIS). Vol. LI. No. 35. 31 May. P. 714.

Airport terminal building, Merignac, by J. A. Duprat. Includes control tower, restaurant, club-room, offices, etc.

ARCHITECTURAL REVIEW. Vol. LXXIX. No. 475. June. P. 255.

ARCHITECTS' JOURNAL. Vol. LXXXIII. No. 2160. 11 June. P. 915.

The London Gliding Club's building, Dunstable, by Christopher Nicholson. Well illustrated and described.

ARCHITECTS' JOURNAL. Vol. LXXXIII. No. 2159. 4 June. P. 868.

BUILDER. Vol. CL. No. 4870. 5 June. P. 1121.

ARCHITECT AND BUILDING NEWS. Vol. CXLVI. No. 3520. 5 June. P. 270.

Gatwick Aerodrome, by Hoar, Marlow and Lovett [A.I.].

BRIDGES

MOSCOW CONSTRUCTOR. 1936. No. 6. P. 2.

Various designs for bridge over the Moscow river at Moscow opposite the Kremlin.

WELFARE BUILDINGS

ARCHITECT AND BUILDING NEWS. Vol. CXLVI. No. 3522. 19 June. P. 335.

Mission to Seamen Hostel and Club, Queen's Terrace, Southampton, by Gutteridge & Gutteridge [F. & L.].

ARCHITECTS' JOURNAL. Vol. LXXXIII. No. 2153. 23 April. P. 636.

Briarcroft Hall, Atherton, Lancs, by Taylor and Young [F. & A.]. Additions to colliery social club include gymnasium and assembly hall with stage, etc.

INDUSTRIAL

NATIONAL BUILDER. Vol. XV. No. 11. June. P. 377.

Industrial Buildings. Part 1 of serial article by C. C. Handiside [A.].

BUILDING. Vol. XI. No. 6. June. P. 250.

"A.B.C." bakery and general equipment stores, Camden Town, by C. W. Glover [L.] and Partners.

ARKITEKTEN (HELSINGFORS). 1936. No. 4. P. 49.
Large distillery at Nurmijarvi, about 50 km. from Helsingfors, by Erkki Huttunen; also competition designs for a large distillery for Alkoholilike A.B.

THEATRES AND CINEMAS

BUILDING TIMES. Vol. LVII. No. 8. June. P. 237.
Radio Centre Cinema, East Grinstead, Sussex, by F. E. Jones [F.], seats 1,102 (300 in balcony). Savoy Cinema, Northampton, by W. R. Glen [L.].

NUEVAS FORMAS (MADRID). Vol. II. No. 7.
Cinemas and theatres in Spain and elsewhere. Illustrations and descriptions of fifteen cinemas, etc.

TÉR ÉS FORMA (BUDAPEST). Vol. IX. No. 5-6. P. 127.
"Atrium" cinema, Budapest, by Kozma, building also includes seven floors of flats. Full of interesting detail and equipment. Useful reference.

ARQUITECTURA (MADRID). Vol. XVIII. No. 4. April. P. 91.
Cinema at Salamanca, by F. A. Martos, includes also large dance hall.

CONCERT HALLS

ARCHITECTS' JOURNAL. Vol. LXXXIII. No. 2159. 4 June. P. 867.
Liverpool Philharmonic Hall. Design by H. J. Rowse [F.], for this large concert hall.

HOSPITALS

BUILDER. Vol. CL. No. 4871. 12 June. P. 1166.
Glasgow Western Infirmary ophthalmological buildings, by N. A. Dick [F.], of Burnet, Son and Dick, with O. J. Mackintosh, medical superintendent.

ARCHITECTURAL RECORD. Vol. LXXIX. No. 5. May. P. 368.
Nursing home. Designs by G. E. Good.

CREMATORIUM

BYGMASTAREN (STOCKHOLM). 1936. No. 13. P. 157.
Stockholm Crematorium, illustration and plans of large group of buildings by Asplund.

CHURCHES, ETC.

BOUWKUNDIG WEEKBLAD ARCHITECTURA. 1936. No. 17. P. 197.
Three churches by H. P. J. de Vries.

BAUMEISTER. Vol. XXXIV. No. 6. June. P. 200.
Evangelical Chapel, Murrhardt: a simple stuccoed stone building seating about 200; also design for evangelical church, Reutlinger, both by Ernst Schwadener.

DOMESTIC

JNL. ROYAL ARCH. INST. OF CANADA. Vol. XIII. No. 5. May.

Awards in competition organised by Dominion Minister of Finance for a minimum cost house eligible to be financed under the Dominion Housing Act. Illustrations of 13 designs. Three bedrooms, living-room, dining recess, and in basement furnace room, laundry, etc.

BUILDER. Vol. CL. No. 4872. 19 June. P. 1217.
House at Wentworth, Surrey, by Oliver Hill [F.]. A medium sized country house with six bedrooms.

ARCHITETTURA (ROME). Vol. XV. No. 5. P. 229.
Modern block of flats in Milan by Lingeri and Terragni. Some interesting plan features worth study.

TÉR ÉS FORMA (BUDAPEST). Vol. IX. No. 5-6. P. 127.
Flats in "Atrium" cinema building (see above) and other flats in and near Budapest.

BYGGE KUNST (OSLO). Vol. XVIII. No. 4.
Various articles on Norwegian slum clearance and housing, illustrating some recent replanning schemes in Oslo.

AMERICAN ARCHITECT. May, 1936.
Low cost small houses. Special number on all features of planning and equipment of 3 and 4-bedroomed houses. Full of useful details; also information sheets on planning for motors in small houses; garages, driveways, etc.; a useful reference.

DOCUMENTOS DE ACTIVIDAD CONTEMPORANEA (MADRID). Vol. VI. No. 22. p. 13. Baths. Illustrated history of baths; also sheets of domestic planning information.

HOTELS AND RESTAURANTS

ARCHITECTS' JOURNAL. Vol. LXXXIII. No. 2160. 11 June. P. 903.

Park Royal Hotel, Middlesex, by Welch and Lander and Cachemille-Day [F., A. & F.]: part of scheme for site development which will also include L.P.T.B. Park Royal Station.

MODERNE BAUFORMEN (STUTTGART). Vol. XXXV. No. 6. June.

Two country inns in Germany, both well done in traditional style.

BAUMEISTER. Vol. XXXIV. No. 6. June. P. 211.
Small restaurant, Basle, by P. Zehntner.

ARKITEKTEN (COPENHAGEN). Vol. XXXVIII. No. 3. P. 63.

Summer hotel at Tylösand, by Erik Friberger. A simple minimum-accommodation hotel for visitors doing much of their own work.

ARCHITECTURE ILLUSTRATED. May, 1936. P. 141.
Design for proposed hotel, Queen's Drive, Blackpool, by R. Atkinson [F.].

YOUTH HOSTELS

ARCHITECT AND BUILDING NEWS. Vol. CXLVI. No. 3519. 29 May. P. 247.
Youth Hostel, Ewhurst Green, Surrey, by H. V. Lobb.

FARMS

JOURNAL OF LAND AGENTS' SOCIETY. Vol. XXXV. No. 6. June. P. 308.

Short article on the general construction of cow houses for grade "A" milk.

HEATING AND VENTILATING ENGINEER. Vol. IX. No. 108. June. P. 471.

Heating apparatus for poultry farms: article by L. J. Overton.

DETAILS

MONATSHFTE F. BAUKUNST U. STÄDTBAU. Vol. XXXI. No. 6. June. P. 217.

Architectural ironwork. Well illustrated article on recent German work.

TOWN PLANNING

TOWN AND COUNTRY PLANNING. Vol. IV. No. 15. June. P. 86.

History and description of Hampstead Garden Suburb, well illustrated.

Accessions to the Library

1935-1936-IX

(Incorporating the conclusion of VIII)

Lists of all books, pamphlets, drawings and photographs presented to, or purchased by, the Library are published periodically. It is suggested that members who wish to be in close touch with the development of the Library should make a point of retaining these lists for reference.

Any notes which appear in the lists are published without prejudice to a further and more detailed criticism.

Books presented by publisher for Review marked

Books purchased marked

**Books of which one copy at least is in the Loan Library.*

R.
P.

ARCHITECTURE

GRANGER (FRANK)

The Provenience of the London Vitruvius. (*From Speculum, a journal of mediaeval studies*, xi, Apl.)

pam. 10". Cambridge, Mass.: Mediaeval Academy of America. 1936.

Presented by the author, Prof. Frank Granger.

SOCIÉTÉ CENTRALE DES ARCHITECTES

Annuaire. 1936.

1936. R.

HISTORY

POPE (A. UPHAM)

Some interrelations between Persian and Indian architecture. (American Institute for Persian Art and Archaeology, New York. Reprint series No. 6.) (*From Indian Art and Letters*, ix.)

11". 25 pp.+pls. n.p. [1933 or after.]

Presented by Dr. A. Upham Pope.

ALGERIA, journal

[Special number.] La Cité moderne. Urbanisme, architecture, l'habitation, cover title. (May.)

14 $\frac{3}{4}$ ". Algiers. 1936. (5 fr.) R.

PROFESSIONAL PRACTICE

GREAT BRITAIN: PARLIAMENT—ACTS

London Building Act (Amendment) Act, 1935. (25 & 26 Geo. 5, ch. xcii.)

pam. 9 $\frac{3}{4}$ ". Lond.: H.M.S.O. 1935. 6d. P.

DARTFORD, Urban District

Bye-laws . . . with respect to new streets and buildings, etc.

Reprint. 8 $\frac{1}{4}$ ". Dartford. (1927) 1936. R.

SOUTHPORT, County Borough

*Bye-laws relating to new buildings, etc. 1917 and 1931.

pam. 3 $\frac{1}{2}$ ". Southport. [193—.] R.

BUILDING TYPES

(CIVIL)

BUILDING, journal

*[Special number.] Industrial architecture reference number. (April.)

11 $\frac{3}{4}$ ". Lond. 1936. 1s. P. for Loan Library.

INTERNATIONAL CONGRESS FOR STEEL DEVELOPMENT (4TH), Brussels, 1935

Small span bridges. Papers presented at the . . . Congress . . . Trans. and reprinted by British Steelwork Association.

11" x 8 $\frac{1}{2}$ ". 74 pp. Lond. [1936.] R.

(RELIGIOUS)

TOURNON (PAUL)

L'Église du Saint-Esprit à Paris.

12 $\frac{1}{2}$ ". (iv) pp.+42 pls. [Strasbourg:] Editions d'Architecture, etc. [193—.]

Presented by the author.

COCHRANE (E. L.)

How to look at Yardley Church.

pam. 7". n.p. [1935.] 6d.

Presented by Mr. Benjamin Walker, F.S.A. [A.].

(DOMESTIC)

WHITTEN and ADAMS

*Neighbourhoods of small homes.

1931. Copy to Loan Library.

NEW YORK STATE: STATE BOARD OF HOUSING

Report.

1936. R.

UNITED STATES: PUBLIC WORKS ADMINISTRATION—HOUSING DIVISION: RESEARCH AND INFORMATION BRANCH

Housing digest.

Quarterly.

Vol. i, No. 1 (Oct.) —. 10 $\frac{1}{2}$ ". Washington.

1935—. R.

NATIONAL HOUSING AND TOWN PLANNING COUNCIL

[Memoranda.]

4 pams. 13 $\frac{1}{4}$ ". Lond. 1936. R.

LEEDS, City

Report on survey of overcrowding. Housing Act, 1935.

12 $\frac{1}{4}$ ". 84 pp. [Leeds.] 1936.

Presented by the City Council, through the Medical Officer of Health and the Housing Director.

ALLIED ARTS AND ARCHEOLOGY

COUNCIL FOR ART AND INDUSTRY

General report, etc.: Second. (*From Board of Trade Journal*, leaflet. 13 $\frac{1}{4}$ ". Lond. 1936. R.)

ARCHITECTURAL AND ARCHEOLOGICAL SOCIETIES OF . . .

LINCOLN AND . . . NORTHAMPTON

Reports and papers . . . during [1934]. 1936. R.

BUILDING SCIENCE

PRACTICE AND INDUSTRY

BUILDING INDUSTRIES NATIONAL COUNCIL

[Minutes of annual meeting: 4th, 1936.]

dupl. typescript 1936. R.

[List of officers and committees.]

dupl. typescript 1936. R.

BUILDING INDUSTRIES NATIONAL COUNCIL: TECHNICAL COMMITTEE OF REVIEW

Report on standardisation policy.

pam. 9 $\frac{3}{4}$ ". Lond. 1936. 9d. R.

MATERIALS

DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH: BUILDING RESEARCH

Technical papers.

No. 19. The carbonation of unhydrated Portland cement. By D. G. R. Bonnell.

pam. 9 $\frac{3}{4}$ ". Lond.: H.M.S.O. 1936. 1s. R.

SANITARY SCIENCE AND EQUIPMENT

LOCAL GOVERNMENT AND PUBLIC HEALTH CONSOLIDATION COMMITTEE (MINISTRY OF HEALTH)

Second interim report. (Cmd. 5059.)

9 $\frac{1}{4}$ ". Lond.: H.M.S.O. 1936. 2s. R.

GREAT BRITAIN: PARLIAMENT—BILLS

Public health (London). [H.L.] (51.)

10 $\frac{3}{4}$ ". Lond.: H.M.S.O. 1936. 4s. R.

Draft of a Public Health Bill. Prepared by the (Local Government and Public Health Consolidation) Committee. (Cmd. 5060.)

9 $\frac{1}{4}$ ". Lond.: H.M.S.O. 1936. 3s. 6d. R.

HENLY (A. T.)

Design problems of heating and ventilation.
9 $\frac{1}{2}$ ". xv+382 pp.+diags., some folded. Lond.:
Crosby Lockwood. 1936. £2 2s. P.

TOPOGRAPHY

LAMBERT (R. S.), *editor*

Grand tour. A journey in the tracks of the age of aristocracy.
By Mona Wilson [and others].
8 $\frac{1}{2}$ ". 167 pp.+pls.+folding map. Lond.:
Faber & Faber. 1935. 10s. 6d. P.

BELL (ADRIAN) and others

The Legacy of England. (The Pilgrims' Library series.)
7 $\frac{1}{4}$ ". viii+243 pp.+pls. Lond.:
Batsford. 1935. 5s. R.

VALE (EDMUND)

The Seas & shores of England.
8 $\frac{1}{2}$ ". viii+120+pls. Lond.:
Batsford. 1936. 7s. 6d. R.

BONE (JAMES)

The London perambulator. With pictures by Muirhead Bone.
Cheaper ed. 8". 184 pp.+pls. Lond.: Jonathan Cape.
(1925) 1927. (7s. 6d., for 6s.) P.

WINBOLT (S. E.)

*Bell's Pocket Guides.

Transferred to Loan Library.

BATSFORD, *publ.*

Batsford's Pictorial Guides. Photographed by Geoffrey Gilbert.
No. 4. Hamburg.
8 $\frac{1}{2}$ " x 7". Lond. [1936.] 2s. 6d. R.

HIELSCHER (KURT)

Picturesque Yugo-Slavia. *Etc.* (Orbis Terrarum.)
12". xv pp.+192 pls. (backed). New York: Brentano.
[1926.] (12s. 6d., remd.) P.

BOERSCHMANN (ERNST)

Picturesque China. Architecture and landscape. Louis
Hamilton, trans. (Orbis Terrarum.)
12". xxii pp.+288 pls. (backed). New York: Brentano.
[1925.] (12s. 6d.) P.

CHARTERED SURVEYORS' INSTITUTION

Revision of Ordnance Survey maps. Précis of evidence submitted
to the Departmental Committee appointed by the Minister of
Agriculture, *etc.*

pam. 9 $\frac{1}{2}$ ". Lond. [1936.] R.

MINISTRY OF AGRICULTURE: DEPARTMENTAL COMMITTEE ON
THE ORDNANCE SURVEY

Interim report.

pam. 9 $\frac{1}{4}$ ". Lond.: H.M.S.O. 1936. 3d. R.

TOWN AND COUNTRY PLANNING

McNAMARA (KATHERINE)

Bibliography of planning 1928-1935. A supplement to Manual
of planning information, 1928, by Theodora K— Hubbard and
K— McN—. (Harvard City Planning Studies, x.)
9 $\frac{1}{4}$ ". ix+232 pp. Cambridge, Mass.:
Harvard U.P. 1936. (15s.).
Presented by Harvard University School of City Planning.

GOLDENBERG () and DOLGANOFF ()

The planning of the residential unit. (Abstract translation.
Housing Centre.)
dupl. typescript. 13". (Moscow) [Lond.] (1931) [193—.]
Presented by the Housing Centre.

BLACK (R. VAN NEST and M. H.)

Building lines and reservations for future streets, *etc.* (Harvard
City Planning Studies, viii.)
9 $\frac{1}{4}$ ". xi+243 pp.+iv pls. Cambridge, U.S.: Harvard U.P.
1935. 15s. P.

MINISTRY OF TRANSPORT

*Memorandum No. 336 (Roads). Notes on the lay-out and
construction of roads.
pam. 13 $\frac{1}{4}$ ". Lond.: H.M.S.O. 1930. 2d. P. for Loan Library.

SALKFIELD (T.)

Road making and road using. (Pitman's Transport Library.)
8 $\frac{1}{2}$ ". xi+167 pp. Lond.: Pitman. 1934. 5s. P.

DUNNAGE (J. A.)

Transport and the public.
7 $\frac{1}{4}$ ". xii+240 pp. Lond.: Routledge. 1935. 6s. R.

GARDENS, RURAL PRESERVATION

BOARD OF EDUCATION

Educational pamphlets, *cont.* :—

*No. 80. School playing fields.

Reprint. pam. (diag. in pocket). 7 $\frac{1}{4}$ ". Lond.:
H.M.S.O. 1930 (1935). 4d. P. For Loan Library.

SCAPA SOCIETY, *etc.*

Scapa Quarterly papers. N.S. No. 15.
leaflet 10". Lond. 1936.

COUNCIL FOR THE PRESERVATION OF RURAL WALES

Annual report : 8th, [on] 1935. 1936. R.

DRAWINGS

WOOD (EDGAR)

[Drawings of buildings designed by E— W—.]
Presented by Mr. J. Henry Sellers.

C.P.R.E., R.I.B.A. and I.O.B. Advisory Panels

CAMBRIDGE AND ISLE OF ELY

At the Annual Meeting of the C.P.R.E. Branch, held on
15 May, the Chairman, H. C. Hughes, Esq., called attention
to the work done by the County Advisory Panel, and by the
Area Panel which advised the Chesterton Rural District
Council on the building schemes submitted to the Council for
approval. The Constitution of the County Panel has been
modified so that adequate representation is now given to the
Local Authorities in the area as well as to architects, builders,

surveyors and landowners. Mr. Theodore Fyfe, M.A. [F.],
is the Secretary to the Panel organisation, which has done
much good work in the past, and is now one of the most pro-
gressive in the country.

SOUTH YORKS.

The Panel Secretary has received a communication which
indicates that the co-operation of the Panels will be welcomed
in the area round Doncaster, where a planning scheme is in
its initial stages.

The Annual Elections of the Council and Standing Committees

THE SCRUTINEERS' REPORT

TO THE CHAIRMAN OF THE GENERAL MEETING
MONDAY, 22 JUNE 1936

The Scrutineers appointed to count the votes for the election of the Council and Standing Committees for the Session 1936-1937 beg to report as follows:—

1,667 envelopes were received—472 from Fellows, 784 from Associates and 411 from Licentiates.

Of the above totals, thirteen envelopes—5 from Fellows, 6 from Associates and 2 from Licentiates—were invalid, 7 having been posted after the last day for the receipt of envelopes and 6 having been received unsigned by the voters.

The result of the election is as follows:—

COUNCIL 1936-1937

PRESIDENT

Mr. Percy Edward Thomas (unopposed)

PAST PRESIDENTS

Mr. Edward Guy Dawber (unopposed)

Sir Giles Gilbert Scott (unopposed)

VICE-PRESIDENTS

Mr. Edwin Stanley Hall (unopposed)

Mr. Stanley Hinge Hamp (unopposed)

Mr. Charles Henry Holden (unopposed)

Mr. Ingalt Sanders (unopposed) (nominated by the Allied Societies' Conference under Bye-law 28 (a))

HONORARY SECRETARY

Mr. Henry Martineau Fletcher (unopposed)

HONORARY TREASURER

Lieut.-Col. Percy Alfred Hopkins (unopposed)

MEMBERS OF COUNCIL

<i>Elected</i>		Votes
1.	Professor Leslie Patrick Abercrombie	884
2.	Professor Stanley Davenport Adshead	700
3.	Mr. Charles Cowles-Voysey	653
4.	Mr. Henry V. Ashley	611
5.	Mr. Philip Dalton Hepworth	564
6.	Mr. Herbert Tudor Buckland	527
<i>Not Elected</i>		Votes
7.	Mr. Howard Morley Robertson	511
8.	Mr. John Murray Easton	433
9.	The Hon. Humphrey Pakington	372
10.	Major Thomas Cecil Howitt	358
11.	Professor Reginald Annandale Cordingley	345
12.	Mr. John Alan Slater	326
13.	Mr. Michael Theodore Waterhouse	304
14.	Lieut.-Col. Ernest Gee	302
15.	Mr. James Robertson Adamson	275
16.	Mr. Blakeley Rinder Gribbon	262
17.	Mr. Arthur Hamilton Moberly	250
18.	Mr. Serge Chermayeff	239
19.	Mr. Norman Culley	238
20.	Mr. Thomas Edward Scott	218
21.	Mr. Arthur Leonard Roberts	202
22.	Mr. Arthur Henry Ough	159
23.	Mr. Harold Stratton Davis	155
24.	Mr. Baxter Greig	84

1,633 Voting Papers were received, of which 9 were invalid.

ASSOCIATE MEMBERS OF COUNCIL

<i>Elected</i>		Votes
1.	Mr. Ernest Berry Webber	927
2.	Mr. Charles Woodward	716
3.	Mr. Robert Norman Mackellar	589
<i>Not Elected</i>		Votes
4.	Mr. Wesley Dougill	450
	Mr. L. W. Thornton White }	401
6.	Mr. Ronald Aver Duncan	335
7.	Mr. John Challice	299
8.	Mr. John Gordon Dower	188
9.	Mr. Robert Furneaux Jordan	188

1,633 Voting Papers were received, of which 6 were invalid.

LICENTIATE MEMBERS OF COUNCIL

<i>Elected</i>		Votes
1.	Mr. Francis Robert Taylor	759
2.	Mr. William Alban Jones	683
<i>Not Elected</i>		Votes
3.	Mr. Louis Blanc	585
4.	Mr. William Walter Begley	499

1,633 Voting Papers were received, of which 7 were invalid.

REPRESENTATIVES OF ALLIED SOCIETIES IN THE UNITED KINGDOM OR THE IRISH FREE STATE

(1) *Six Representatives from the Northern Province of England:*

Mr. Harold Oswald (Northern Architectural Association).
Lieut.-Col. George Westcott (Manchester Society of Architects).

Mr. Bernard Michael Ward (Liverpool Architectural Society).
Mr. Harry Andrew (York and East Yorkshire Architectural Society).

Mr. Victor Bain (West Yorkshire Society of Architects).
Mr. John Charles Amory Teather (Sheffield, South Yorkshire and District Society of Architects and Surveyors).

(2) *Five Representatives from the Midland Province of England:*

Mr. Alfred Hale (Birmingham and Five Counties Architectural Association).

Mr. Clement Stretton (Leicester and Leicestershire Society of Architects).

Mr. George Pemberton Allen (Northamptonshire, Bedfordshire and Huntingdonshire Association of Architects).

Mr. Claude Elborne Howitt (Nottingham, Derby and Lincoln Architectural Society).

Mr. Francis Harold Swindells (East Anglian Society of Architects).

(3) *Six Representatives from the Southern Province of England:*

Captain Ernest Edward Kemeys-Jenkin (Devon and Cornwall Architectural Society).

Mr. William James Stenner (Wessex Society of Architects).

Mr. Alfred Saxon Snell (Berks, Bucks and Oxon Architectural Association).

Lieut.-Col. Reginald Fowler Gutteridge (Hampshire and Isle of Wight Architectural Association).

Mr. Hugo Ritchie Bird (Essex, Cambridge and Hertfordshire Society of Architects).

One representative to be nominated by the Council of the South-Eastern Society of Architects.

- (4) *Four Representatives of Allied Societies in Scotland*, nominated by the Council of the Royal Incorporation of Architects in Scotland:

Col. John Maurice Arthur.
Mr. Charles Geddes Soutar.
Mr. William James Walker Todd.
Mr. William Brown Whitie.

- (5) *One Representative of Allied Societies in Wales*, nominated by the Council of the South Wales Institute of Architects:

Mr. William Sydney Purchon.

- (6) *Two Representatives of Allied Societies in Ireland*:

Mr. John Joseph Robinson (Royal Institute of the Architects of Ireland).

One representative to be nominated by the Council of the Royal Society of Ulster Architects.

REPRESENTATIVES OF ALLIED SOCIETIES IN THE BRITISH DOMINIONS OVERSEAS

To be nominated by the Councils of each of the following:

The Royal Architectural Institute of Canada.

The Royal Australian Institute of Architects.

The New Zealand Institute of Architects.

The Institute of South African Architects.

The Indian Institute of Architects.

REPRESENTATIVE OF THE ARCHITECTURAL ASSOCIATION (LONDON)

Mr. Leonard Holcombe Bucknell (unopposed)

REPRESENTATIVE OF THE ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS

CHAIRMAN OF THE BOARD OF ARCHITECTURAL EDUCATION

Mr. Thomas Arthur Darcy Braddell (unopposed)

CHAIRMAN OF THE ART, LITERATURE, PRACTICE AND SCIENCE STANDING COMMITTEES

CHAIRMAN OF THE ALLIED SOCIETIES' CONFERENCE

Mr. Ingaltton Sanders (unopposed)

CHAIRMAN OF THE ARCHITECTS' REGISTRATION COUNCIL OF THE UNITED KINGDOM

Mr. Sydney Tatchell (unopposed)

CHAIRMAN OF THE R.I.B.A. COMPETITIONS COMMITTEE

HONORARY AUDITORS

Mr. Alfred Harold Goslett (unopposed)

Mr. Frank John Toop (unopposed)

ART STANDING COMMITTEE

1936-1937
FELLOWS

<i>Elected</i>		Votes
1. Mr. George Grey Wornum	1,162
2. Mr. Nugent Francis Cachemaille-Day	933
3. Mr. Bernard Alexander Miller	791
4. The Hon. Humphrey Pakington	752
<i>Not Elected</i>		Votes
5. Mr. Edward William Armstrong	}	725
Mr. Ernest Chawner Bewlay		
7. Mr. John Henry Forshaw	511

1,573 Voting Papers were received, of which 4 were invalid.

ASSOCIATES

<i>Elected</i>		Votes
1. Mr. Walter Monckton Keesey	743
2. Mr. Joseph Stanley Allen	428
<i>Not Elected</i>		Votes
3. Mr. Edward Brian O'Rorke	413
4. Mr. Derek Lawley Bridgwater	406

5. Mr. Henry Braddock	198
6. Mr. John Reginald Truelove	192
7. Mr. Lawrence Wright	188
8. Mr. William Crabtree	112
9. Mr. Philip Garforth Freeman	93
10. Mr. Harold Frank Hoar	76

1,573 Voting Papers were received, of which 11 were invalid.

LICENTIATES

<i>Elected</i>		Votes
1. Mr. Sidney Lunn Whitehouse	694
<i>Not Elected</i>		Votes
2. Sir William F. V. M. Milner	577

1,573 Voting Papers were received, of which 2 were invalid.

LITERATURE STANDING COMMITTEE

1936-1937
FELLOWS

<i>Elected</i>		Votes
1. Mr. Harry Stuart Goodhart-Rendel	1,293
2. Professor Lionel Bailey Budden	1,080
3. Mr. Henry Castree Hughes	958
4. Mr. Verner Owen Rees	940
<i>Not Elected</i>		Votes
5. Mr. Andrew Laurence Noel Russell	550
6. Mr. Arthur Stanley George Butler	536
7. Mr. Norman Jewson	328

1,568 Voting Papers were received, of which 4 were invalid.

ASSOCIATES

<i>Elected</i>		Votes
1. Mr. Stephen Ernest Dykes Bower	566
2. Mr. John Newenham Summerson	558
<i>Not Elected</i>		Votes
3. Mr. Hector Othon Corfiato	477
4. Mr. Eric Rowstone Jarrett	468
5. Miss Eleanor Katherine Dorothy Hughes	380
6. Mr. Henry Myles Wright	202
7. Mr. Llewellyn Ebenezer Williams	157

1,568 Voting Papers were received, of which 6 were invalid.

LICENTIATES

<i>Elected</i>		Votes
1. Mr. Basil Ionides	953
<i>Not Elected</i>		Votes
2. Mr. Jesse Castley	383

1,568 Voting Papers were received, of which 4 were invalid.

PRACTICE STANDING COMMITTEE

1936-1937
FELLOWS

<i>Elected</i>		Votes
1. Mr. Leo Sylvester Sullivan	900
2. Mr. Arthur Keen	786
3. Mr. James Robertson Adamson	677
4. Major Charles Frederick Skipper	623
<i>Not Elected</i>		Votes
5. Mr. William Thomas Curtis	582
6. Mr. Michael Theodore Waterhouse	501
7. Mr. Geoffrey Cecil Wilson	469
8. Mr. William Ernest Watson	337
9. Mr. Bernard John Dicksee	336
10. Mr. Frank Halliwell Shann	217
11. Alderman George Arthur Lansdown	201

1,583 Voting Papers were received, of which 6 were invalid.

ASSOCIATES

<i>Elected</i>		Votes
1. Mr. John Douglas Scott	888	
2. Mr. Thomas Scott Barnes	441	
<i>Not Elected</i>		Votes
3. Mr. Clifford Ewart Culpin	378	
4. Mr. Edmund Blayney Clarke	319	
5. Mr. Terence Walter Snailum	317	
6. Mr. Guy Whitehall Silk	198	
7. Mr. Winston Walker	131	

1,583 Voting Papers were received, of which 6 were invalid.

LICENTIATES

<i>Elected</i>		Votes
1. Mr. Stanley Arthur Heaps	1,058	
<i>Not Elected</i>		Votes
2. Mr. Malcolm Waverley Matts	212	

1,583 Voting Papers were received, of which 4 were invalid.

SCIENCE STANDING COMMITTEE

1936-1937
FELLOWS

<i>Elected</i>		Votes
1. Mr. Alan Edward Munby	1,024	
2. Mr. Alfred Henry Barnes	748	
3. Mr. William Edward Vernon Crompton	712	
4. Mr. Arthur John Hope	555	
<i>Not Elected</i>		Votes
5. Lieut.-Col. Percy Alfred Hopkins	461	
6. Mr. Samuel Pointon Taylor	456	
7. Mr. Thomas Wallis	443	

8. Mr. Digby Lewis Solomon	302
9. Mr. Percy Vivian Burnett	283
10. Mr. James Ernest Franck	280
11. Mr. Richard Bertram Ling	147

1,572 Voting Papers were received, of which 9 were invalid.

ASSOCIATES

<i>Elected</i>		Votes
1. Mr. L. W. Thornton White	998	
2. Mr. Walter M. Goodesmith	700	
<i>Not Elected</i>		Votes
3. Mr. Alister Gladstone MacDonald	409	
4. Mr. William Francis Benjamin Lovett	300	
5. Mr. Frank Leonard Jackman	196	
6. Mr. Charles Wilfrid Box	188	

1,572 Voting Papers were received, of which 6 were invalid.

LICENTIATES

<i>Elected</i>		Votes
1. Mr. Oliver Percy Bernard	884	
<i>Not Elected</i>		Votes
2. Mr. George Nathaniel Kent	440	

1,572 Voting Papers were received, of which 5 were invalid.

ERNEST G. ALLEN.
CECIL H. PERKINS.
D. H. BEATY-POWNALL.
ROBERT W. PITE.
ERNEST W. BANFIELD.
RONALD TOPHAM.

16 June 1935.

Notes

VISIT OF MEMBERS TO THE BUILDING RESEARCH STATION

The visit of members, organised by the Science Standing Committee, to the Building Research Station on 18 June, was well attended. Twenty-five members, the majority of whom were paying their first visit, were conducted round in three parties. Since it is not possible in one afternoon to cover the whole work of the Station, even in a superficial manner, special attention was paid to items of current interest. Among these were the panels for testing the resistance of various wall constructions to rain, the current research on asphaltes, recent work on cement renderings, and the new and important large scale investigations into the transmission of noise in structures. An elaborate machine—described by one member as “Heath Robinson but built by an engineer”—for accelerated weathering tests on asphalte samples attracted great interest. In a two-hour cycle the machine exposes the samples successively to ultra-violet light, a water spray, freezing and heat. But members were, perhaps, most impressed by the new work on sound transmission of floors, particularly as many of them appeared to be engaged on the design of flats. The laboratory consists of a structure on two levels so insulated that sound is transmitted from above to below only through the floor. A standard impact machine simulating footfalls is placed on the upper floor, and observers record the intensities in the room below. At present a typical hollow-tile floor is being subjected to tests with various forms of suspended ceiling, upper surfaces and floating floors. A new and remarkably ingenious type of

floating floor, devised at the Station, was demonstrated to the visitors in such a way that they were able to compare the effect of impact on the bare hollow-tile floor and on the sound-resisting floating floor placed above it. In another building the resistance of partitions to air-borne sounds (a wireless set was used) was being investigated, the high efficiency of a double breeze partition being demonstrated to the visitors. After tea had been taken and Mr. T. E. Scott, Chairman of the Science Committee, had thanked the officers of the Station, individual members remained to see items of work in which they were specially interested.

APPOINTMENT VACANT
UNIVERSITY OF CAMBRIDGE

DIRECTOR OF THE SCHOOL OF ARCHITECTURE

The post of Director of the School of Architecture is vacant. The appointment, which will date from 1 October 1936, will be made on the recommendation of the General Board for a period not exceeding five years. The person appointed must reside in Cambridge; he will be eligible for reappointment, provided that the period of appointment or reappointment does not extend beyond the end of the academical year in which he attains the age of sixty-five years. The stipend of the Director will be £750, and he must place himself under the Superannuation Scheme. The person appointed will be required to act as Head of the Department of Architecture, to direct the work of the Department, and to give lectures. He will be allowed to undertake private practice as an architect, provided this does not interfere with his duties as Director of

the School of Architecture. Applications for this post, together with the names of not more than three persons to whom reference can be made, should be sent before 11 July 1936 to the Secretary-General of the Faculties, The Registry of the University, Cambridge, from whom further particulars may be obtained. No testimonials should be sent in the first instance.

LEVERHULME SCHOLARSHIP IN ARCHITECTURE

The Leverhulme Scholarship tenable at the Architectural Association School of Architecture, value £1,000, which includes payment of fees and maintenance for a period of five years, has been awarded this year to Mr. W. A. S. Doig, of Dundee.

HONAN SCHOLARSHIP, 1937

The conditions for the Honan Scholarship, 1937, have been issued and can be obtained from Messrs. Hodgson, Morris & Co., 41 North John Street, Liverpool, 2. This travelling scholarship is for £50 and is open to any member of the Liverpool Architectural Society who is under 30 years of age on 31 December 1936. The design subject is new premises for the Liverpool Architectural Society.

MR. HUBERT MEGAW

Mr. Hubert Megaw[S.], one of the few English scholars concentrating on Byzantine work, has been appointed Director

of Antiquities in the Island of Cyprus. Mr. Megaw was trained as an architect in the Cambridge University School of Architecture and was the first person from the school to win an open University prize, the Walston Studentship, and subsequently won the MacMillan Studentship tenable at Athens.

ANGLO-SWEDISH SOCIETY'S HOLIDAY COURSE

The Anglo-Swedish Society extend a most cordial invitation to those interested in Swedish culture to take part in the holiday course being arranged from 15 to 31 August in Stockholm.

The programme intends to combine studies of Swedish architecture, arts and handicrafts, modern Swedish paintings, housing schemes and decorative art with demonstrations and lectures by prominent scholars. It also includes sight-seeing tours in Stockholm and excursions to places farther afield.

The price for the tour is £16 16s., first-class steamer, third-class rail travel, excellent accommodation in Stockholm, with bed and breakfast, including service. For those who wish to make a longer stay in Sweden, an extension can be granted for another fortnight. The Anglo-Swedish Society undertakes all arrangements, they assure all participants of warm hospitality, and that every exertion will be made to offer them a holiday full of varied interest and recreation.

For detailed programme and further information please apply to the Secretary, Anglo-Swedish Society, 10 Staple Inn, High Holborn, W.C.1.

Obituary

DAME HENRIETTA BARNETT, D.B.E.

A Memoir by

SIR RAYMOND UNWIN P.P.R.I.B.A.

At the ripe age of 85, the effective and happy life of Dame Henrietta Barnett closed on 10 June. The occasion calls for a few words of tribute to the good work in many directions which she accomplished; and here especially to the notable service which she rendered to planning and architecture.

In conceiving and carrying to success the project of the Hampstead Garden Suburb she provided an invaluable opportunity for the demonstration of what good planning could accomplish in mixed domestic development, and how much could be done with a little guidance and co-ordination to secure coherence and harmony in the work of many architects while leaving to each ample scope for individuality in the form of expression.

My own recollections of Canon and Mrs. Barnett go back to the years about 1884, when I was seeking advice as to my future work. Like many others who then applied to Canon Barnett, I did not seek in vain. I have memories of much good talk at a river picnic, of a visit to Toynbee Hall, then recently started, and of the deep impression made upon a young man, both by the Canon and his wife. When, therefore, in 1906 I was asked to help Dame Henrietta in planning the Hampstead Garden Suburb, I eagerly embraced the privilege of working for and with those for whom as a youth I had acquired such great respect on occasions which they had long forgotten.

Dame Henrietta was liberally endowed with those qualities which make for success in such projects as she carried through. She had the power of seeing vividly all the reasons and arguments favourable to the course which she had decided to be the right one. When her mind was made up, objections and difficulties ceased to exist for her, and largely for those also whom she wished to influence. She had thus great power to persuade other people to help her in the way she wished.

An indefatigable worker, she always prepared carefully for every interview or meeting, and generally had the advantage of knowing more about the affairs under discussion than anyone else present.

In the creation of the garden suburb she was a pioneer, exerting considerable influence on the course of town planning in this country and elsewhere, and helping to promote the subsequent introduction of the first Town Planning Act, by John Burns, three years later. In this project Dame Henrietta had a success which has so far proved unique: in no other development have all the combined ideals for which she worked been so fully realised.

The inception of the project is a good example of the way in which she faced a difficulty. Her first effort was to secure the open space of 80 acres in extent to protect the northern slope of Hampstead Heath. The money raised not being sufficient to buy the full strip of land, the difficulty was met by arranging the 80 acres so as to leave to the owners of the estate a strip of building land around three sides of it, which would be enhanced in value by fronting on the open space. This, however, left those playing fields, to which the space was to be chiefly devoted, at the mercy of the type of building development which might surround them. To save this Heath extension from being spoiled, Dame Henrietta conceived the heroic scheme of buying up the remaining 240 acres of the estate and having it developed as an ideal garden

suburb, where folk of all conditions of life might live together, and share in the community activities, and where an effective control of the whole development and the architecture of the buildings might afford an example of harmonious building. Once started on the scheme, it became her main life's work, and she devoted endless time and thought and all her great abilities to carrying the scheme to success.

At times, no doubt, the strong views which she held, the purposes which were relentlessly pursued and her zeal to have all her ideals fully cared for—a zeal which could not always be tempered by equal technical knowledge—were difficult to reconcile with the best architectural expression, and at times they brought her technical advisers into tight corners. She had the architectural success of the scheme genuinely at heart, however. Sir Edwin Lutyens was called in as consultant to reinforce the architects. Once convinced, she could be relied on to back her technical advisers, and she was so thoroughly right in her main aims and ideals, and possessed such power to realise them, that it was a privilege to aid her.

She lived to see the difficulties caused by the war overcome, and the scheme emerge financially sound; to receive the gratitude of the many folk of all classes who enjoy the amenities and communal opportunities for recreation and culture which, thanks to her efforts, are available for the residents; and to realise the extent to which her efforts have been appreciated throughout the much wider sphere of those in all lands who have been helped by her pioneer work.

C. HOWARD WALKER

Long friendship with Howard Walker entitles me, I hope, to add a line to the memoir of him by Dr. Thomas Adams.

It was in the Spring of 1882 that Walker and I fell across one another. My friends Howard Ince and Leonard Stokes had just landed with me at Naples, after a tour through Sicily. Ince was that season's Gold Medallist of the R.A. Architectural School, and he had brought out with him an unsuccessful competitor for this prize.

As we were preparing to sit down to our evening meal, laid-out in the courtyard of a small hotel at Pompeii, we three found ourselves being placed at table exactly facing three male Americans, talking together unashamedly. Like Britons true, we instinctively restrained our tongues for the moment, and doubtless put on the correct stony stare. Whilst sitting down I noticed that the man opposite to me made some remark, in a lowered voice, to his next companion who at once answered briefly. Some half-century was to pass before I learnt what this scrap of conversation amounted to. Howard Walker, a young architect, from Boston, had said to his friend Turner, a water-colour painter, "I mean to talk to these fellows." "Better not," replied Turner, "only get snubbed!" This was enough for Walker. With a cheerful countenance he at once looked across to me, making some pleasant remark, by way of breaking the ice. I quite forget what it was he did say; but the ice broke. It was the opening passage in a friendship that went on ever-growing with our lengthening years.

After returning home and there building up an extensive practice, besides engaging in other activities, Walker still contrived an occasional revisit to Europe, taking London in his stride. Then, perhaps, he and I would make time to view

together one or more buildings of the day, approaching completion or newly-built; say, Bentley's Westminster Cathedral, Sir John Burnet's north front of the British Museum, or—of later years—Sidney Greenslades' National Library at Aberystwyth.

To accompany Walker on any such adventure was to enjoy a shortened course in the education of an architect.

WALTER MILLARD [*Ret. F.*]

FRANCIS BAUGH ANDREWS [*F.*]

We regret to record the death, on 30 April, of Mr. F. B. Andrews, F.S.A., F.R.Hist.S. [*F.*]. He became an Associate in 1889 and a Fellow in 1928, and was the designer of a number of churches in Birmingham.

Mr. Andrews was the chief authority on the mediæval architecture of Worcestershire, and was the writer of a series of papers in the Transactions of the Birmingham Archaeological Society on Pershore Abbey, dealing not only with the building, with but its domestic life in the Middle Ages. Himself a Pershore man, he made the study of the Abbey and its history a lifelong pursuit, and on the death of Sir Harold Brakspear he was appointed the Pershore Abbey architect.

He was for many years honorary secretary of the Birmingham Archaeological Society and editor of its transactions, and at the time of his death he was its president. He took a deep interest in the progress of the Birmingham Old Library in Margaret Street, of which he became vice-president in 1913 and held the office of president in 1915, and again in 1935. For twenty-one years, from 1913 to 1934, he was a member of the council of the Birmingham and Midland Institute, and was vice-president in 1923 and 1924. He was also the honorary architect to the Institute.

FREDERICK JOHN ING [*F.*]

We regret to record the death in Natal of Mr. F. J. Ing, in February. Mr. Ing was born in 1868, and after being articled in Reading went to Johannesburg in the early nineties. After the Boer War, in which he served in the Irregular Mounted Corps, he settled in Durban, after winning the competition with H. Wells for the Durban Club building. There he remained until his death, in partnership first with J. D. Anderson, and later with R. N. Jackson and Ian Park-Ross, becoming a Fellow in 1925.

With Mr. Anderson he was awarded first premium in the competition for the Pretoria Railway Station, and he designed a great number of factories, offices, technical colleges and banks.

Mr. Ing was a man of great singleness of purpose and serenity of mind and was held in great affection and regard by all those whom he met in the course of a long practice.

ADRIAN ELMY SPACKMAN [*Ret. A.*]

We regret to record the death of Mr. A. E. Spackman, who died on 13 March 1936. Mr. Spackman was born in 1860, and was articled to Messrs. Brown & Gill, Bath, becoming an Associate in 1891. For some years he worked for the Great Eastern Railway, but in 1896 he was appointed Director of the Works Department of H.M. Dockyard, Sheerness. Afterwards he was Director of Works to the London and South Western until his retirement in 1932.

ALLIED SOCIETIES

AWARD OF SOUTH WALES INSTITUTE OF ARCHITECTS PRESENTATION OF BRONZE MEDAL TO MR. PERCY THOMAS

The jury appointed by the South Wales Institute of Architects made their award in favour of the Guildhall, Swansea, designed by Mr. Percy Thomas, O.B.E., President of the R.I.B.A.

The ceremony of unveiling the plaque took place on Friday, 29 May. The plaque was fixed on the left of the grand entrance to the building and immediately above the foundation stone. It had been suitably veiled, and Mr. Percy Thomas invited the Mayor to unveil it.

About 200 people witnessed the ceremony inside the Guildhall of the presentation of a bronze medal and diploma to the architect, and also the presentation of a replica to His Worship the Mayor of Swansea, as representing the owners of the building. Most of the jury were present.

Mr. Purchon, President of the South Wales Institute of Architects, explained the purpose of awarding bronze medals in the various districts and gave the reasons why the jury made their award in favour of the Guildhall. The President of the Royal Institute spoke of the honour he felt upon the occasion and alluded to the fact that he was in a somewhat awkward position, being President of the Royal Institute and the designer of the building at the same time.

The ceremony in the Guildhall took place in the suite of committee rooms, where the partitions had been folded back, and about 200 guests much appreciated the ceremony and afterwards took refreshments in the dining hall.

NORTH WALES ARCHITECTURAL SOCIETY

At the Annual Meeting of the North Wales Architectural Society, held in the Council Chamber of the University College of North Wales at Bangor on Saturday, 6 June, the following officers were elected:—

President: Mr. Richard Hall [F.]. Vice-President: Mr. S. Colwyn Foulkes, M.Arch. [A.]. Hon. Treasurer: Mr. Richard Hall [F.]. Hon. Secretary: Capt. Robert Parker, M.C., P.A.S.I. [A.]. Members of Council: Mr. Whitfield Burnett [F.], Mr. H. Harold Hughes, M.A., F.S.A., R.C.A. [A.], Mr. G. A. Humphreys,

F.S.A., R.C.A. [F.], Mr. Herbert L. North, B.A. Cantab. [F.], and Mr. F. A. Roberts [F.]. Hon. Excursion Secretary: Mr. L. Moseley, P.A.S.I. [L.]. Representatives on Liverpool Architectural Society Council: Mr. G. A. Humphreys, F.S.A., R.C.A. [F.], and Mr. S. Colwyn Foulkes, M.Arch. [A.]. Allied Societies Conference: Mr. S. Colwyn Foulkes, M.Arch. [A.]. Auditor: Mr. H. Senogles, F.C.A., Bangor.

The Hon. Members of the Society are: The Right Hon. Lord Boston, F.S.A., the Right Hon. Lord Aberconway, Principal Emrys Evans, M.A., B.Litt., and Professor W. B. Edwards, M.A., M.Arch. [A.].

SOUTH-EASTERN SOCIETY SUMMER VISITS

To Belgium, 24-27 July

Following last year's successful visit to Antwerp, Brussels and Ypres, it is intended this year to make another cruise to Ghent and Zeebrugge. Our Belgian colleagues are arranging various visits from these ports. The railway company has been good enough to grant an option on 100 reservations at a reduced rate of 68s. 6d. from London. This includes first-class cabins on steamer and all meals on board.

To Russia, 15 August to 13 September

Some Russian colleagues are arranging interesting visits in Leningrad, Moscow, Kharkov, Sevastopol, Yalta, Odessa and Kiev. The journey will be made by up-to-date motor ships from London to Leningrad via the Kiel Canal. First-class hotels, railway travel with reserved sleeping berths, necessary meals on route, conveyance to and from hotels, sight-seeing in saloon motor buses, and services of guide interpreters at an inclusive charge of £52, including Soviet entrance and exit visas. This visit is strongly recommended as a thoroughly satisfactory combination of comfort and economy.

Any member of the R.I.B.A. and its Allied Societies wishing to take part in any of these visits can obtain further particulars from the General Secretary of the South-Eastern Society of Architects, "St. Moritz," The Upper Avenue, Eastbourne. Ladies are especially welcomed.

Notices

THE R.I.B.A. KALENDAR 1936-37

The attention of members is drawn to the leaflet enclosed with this issue of the JOURNAL. Changes of address, etc., for inclusion in the forthcoming issue of the *Kalendar* must be notified to the Secretary R.I.B.A. BEFORE SATURDAY, 22 AUGUST.

ARCHITECTS' INDEMNITY INSURANCES

The attention of members is particularly drawn to the important announcement with regard to Architects' Indemnity Insurances which is contained in the "Journal" columns on page 843 of this issue.

THE R.I.B.A. REGISTER OF ASSISTANTS SEEKING ENGAGEMENTS

Members and Students of the R.I.B.A. and the Allied and Associated Societies are reminded that a Register of Assistants seeking engagements is kept at the offices of the Royal Institute.

An assistant seeking employment should obtain from the Secretary R.I.B.A. the necessary form (to be filled up in duplicate) on which particulars must be given as to the applicant's age, qualifications, salary required, references, etc.

The application will hold good for one month from the date of receipt, after which it must be renewed unless the applicant has meanwhile obtained employment.

Architects, whether members of the R.I.B.A. or not, will be furnished on application with the names and addresses of persons desiring employment as assistants, improvers or clerks of works as the case may be. Architects applying for assistants should give the following particulars of their requirements: (1) whether temporary or permanent engagement; (2) junior or senior assistants; (3) particulars of duties and style of work; (4) salary offered.

ASSOCIATES AND THE FELLOWSHIP

Associates who are eligible and desirous of transferring to the Fellowship are reminded that if they wish to take advantage of the election to take place on 19 October 1936 they should send the necessary nomination forms to the Secretary R.I.B.A. not later than Saturday, 4 July.

LICENTIATES AND THE FELLOWSHIP

The attention of Licentiates is called to the provisions of Section IV, Clause 4 (b) and (c), of the Supplemental Charter of 1925. Licentiates who are eligible and desirous of transferring to the Fellowship can obtain full particulars on application to the Secretary R.I.B.A., stating the clause under which they propose to apply for nomination.

Membership Lists

APPLICATIONS FOR MEMBERSHIP

ELECTION: 20 JULY 1936

In accordance with the terms of Bye-laws 10 and 11, an election of candidates for membership will take place at the Council Meeting to be held on Monday, 20 July 1936. The names and addresses of the candidates, with the names of their proposers, found by the Council to be eligible and qualified in accordance with the Charter and Bye-laws are herewith published for the information of members. Notice of any objection or any other communication respecting them must be sent to the Secretary R.I.B.A. not later than Tuesday, 7 July 1936.

AS FELLOWS (10)

DEMPSTER: JOHN AUSTIN [A. 1921], Miners' Welfare Committee, Mines Department, Romney House, Marsham Street, S.W.1: "Ballochmyle," 21 The Warren, Carshalton Beeches, Surrey. Proposed by J. H. Forshaw, Thomas S. Tait and Professor Patrick Abercrombie.

FOX: CHARLES WILLIAM [A. 1925], 8 Southampton Street, W.C.1; Attimore Road, Welwyn Garden City, Herts. Proposed by Louis de Soissons, Arthur W. Kenyon and C. H. James.

SHEARER: THOMAS SMITH [A. 1920], 9 Southampton Street, W.C.1; 55 Attimore Road, Welwyn Garden City, Herts. Proposed by Maurice E. Webb, Thomas S. Tait and Alex. T. Scott.

And the following Licentiates who have passed the qualifying examination:—

AITKEN: HENRY ANDREW, 1 New Court, Lincoln's Inn, W.C.2; 3 Steele's Studios, Haverstock Hill, N.W.3. Proposed by W. F. C. Holden, Edward Maufe and Darcy Braddell.

ALDRIDGE: VERNON, Whitwell Road, Ventnor, Isle of Wight; The Avenue, Totland. Proposed by Lt.-Col. R. F. Gutteridge, Herbert J. Rowse and J. Stockdale Harrison.

HENSON: CHARLES ARTHUR EDWARD, 1 Old Burlington Street, W.1; 83 St Giles' Street, Northampton; 68 Derngate, Northampton. Proposed by Sir John Brown, F. H. Allen and G. H. Lewin.

MENDIS: AHANGAMA BADUGEY, A.R.C.A.(Lond.), Magalle, Galle, Ceylon. Proposed by I. B. Pite, Sir John J. Burnet and H. St. John Harrison.

PEARSON: ERNEST WALTER, 2 Beresford Road, Bournemouth; "Sea Point," Wentworth Avenue, Bournemouth. Proposed by Frank T. Verity, C. Lovett Gill and W. Hector Mackenzie. And the following Licentiates who are qualified under Section IV, Clause 4 (c) (ii) of the Supplemental Charter of 1925:—

TOOMER: ALBERT JOHN, County Architect, Somerset; Park Street, Taunton; Midfields, Comestrowe, Taunton. Proposed by H. S. W. Stone, H. Bryant Newbold and T. Walker.

WEALD: GEORGE, County Hall, S.E.1; 10 Kingsbury Avenue, Worcester Park. Proposed by E. P. Wheeler, F. W. Troup and Frederick R. Hiorns.

AS ASSOCIATES (18)

CADBURY-BROWN: HENRY THOMAS [Passed five years' course at the Architectural Association. Exempted from Final Examination], 17 Clarges Street, Piccadilly, W.1. Proposed by George M. Eaton, Howard Robertson and G. A. Jellicoe.

CLAY: GEORGE INGLIS [Passed five years' course at the Architectural Association. Exempted from Final Examination], "Greenmount," White Post Lane, Cobham, Kent. Proposed by Charles W. W. Thompson and applying for nomination by the Council under the provisions of Bye-law 3 (d).

COLLINS: ARTHUR CHARLES, Dip.Arch.Design(Melb.), Tite Prizeman [Passed the qualifying Examination of the Royal Australian Institute of Architects. Member of the Royal Australian Institute of Architects and of the Royal Victorian Institute of Architects], 15 Mosslea Road, Whyteleafe, Surrey. Proposed by W. T. Curtis, G. L. Desmond Hall and T. Frank Hawes.

COSTELLO: FRANK GIBSON [Foundation Member of the Royal Australian Institute of Architects. Diploma, Sydney Technical

College], 69 Cromwell Avenue, Highgate, N.6. Proposed by Major Hubert C. Corlette, Joseph Emberton and S. Gordon Jeeves.

HARKNESS: JOHN CAM, A.A.Dip [Passed five years' course at the Architectural Association. Exempted from Final Examination], 62 Greenway West, Berkhamsted, Herts. Proposed by Howard Robertson, L. H. Bucknell and A. W. D. Reid.

HIRST: PHILIP EDWIN DEAN [Passed five years' course at the Liverpool School of Architecture, University of Liverpool. Exempted from Final Examination], 23 Eastfield Drive, Sefton Park, Liverpool, 17. Proposed by Professor Lionel B. Budden, Edward R. F. Cole and J. E. Marshall.

HOLT: JOHN [Passed five years' course at the Armstrong College School of Architecture (University of Durham), Newcastle-upon-Tyne. Exempted from Final Examination], 2 The Oval, Chester-Moor, Chester-le-Street, Co. Durham. Proposed by W. B. Edwards, R. Burns Dick and R. Norman Mackellar.

HURD: SAMUEL JAMES [Foundation Member of the Royal Australian Institute of Architects. Passed the qualifying Examination of the Institute of Architects of New South Wales in 1921], 8 Merrion Square, Dublin, I.F.S. Proposed by J. J. Robinson, Laurence M. Gotch and Vincent Kelly.

JOHNSON: WILLIAM FREDERICK [Passed five years' course at the Birmingham School of Architecture. Exempted from Final Examination], "The Mount," Davenport Road, Coventry. Proposed by George Drysdale, John B. Surman and Alfred Hale.

NOBLE: JOHN BAILLIE [Passed five years' course at the School of Architecture, Robert Gordon's Colleges, Aberdeen. Exempted from Final Examination], 26 Pembroke Crescent, London, W.11. Proposed by R. Carruthers Ballantyne, R. Leslie Rollo and Joseph Emberton.

PRASAD: VISHWA NATH, Dip.Arch.Edin. [Passed five years' course at the School of Architecture, Edinburgh College of Art. Exempted from Final Examination], 1 Millerfield Place, Melville Drive, Edinburgh. Proposed by F. C. Mears, John Begg and Professor S. D. Adshead.

SERGEANT: WILLIAM HENRY [Passed five years' course at the Liverpool School of Architecture, University of Liverpool. Exempted from Final Examination], Sunnyside Mansions Hotel, Southport; 53 Ormerod Road, Burnley. Proposed by Professor Lionel B. Budden, Edward R. F. Cole and J. E. Marshall.

SHEPPARD: RICHARD HERBERT [Passed five years' joint course at the R.W.A. School of Architecture, Bristol, and the Architectural Association. Exempted from Final Examination], 33 Store Street, W.C.1. Proposed by Howard Robertson, L. H. Bucknell and C. H. James.

SPREULL: DAVID WILSON, Dip.Arch.(Liverpool) [Passed five years' course at the Liverpool School of Architecture, University of Liverpool. Exempted from Final Examination], 11 Tay Square, Dundee, Scotland; Liverpool School of Architecture, Liverpool. Proposed by Professor Lionel B. Budden, Francis X. Velarde and Edward R. F. Cole.

THOMAS: ARTHUR SELWYN [Passed five years' course at the Welsh School of Architecture, The Technical College, Cardiff. Exempted from Final Examination], 51 Glenmore Road, Belsize Park, Hampstead, N.W.3. Proposed by W. S. Purchon, P. J. Munden and Stanley Hamp.

THORNELY: MICHAEL ERIC [Passed five years' course at the Architectural Association. Exempted from Final Examination], 612 Royal Liver Building, Liverpool. Proposed by Sir Arnold Thornely, H. L. Thornely and J. L. Hampson.

TODD: WEMYSS WYLTON [Associate Member of the Royal Australian Institute of Architects. Admitted as an Associate of the South Australian Institute of Architects by examination in 1928], Dorland House, 14 Regent Street, S.W.1. Proposed by Francis Lorne, Thos. S. Tait and Laurence M. Gotch.

WILLS: MISS DOROTHY MARY [Passed five years' course at the School of Architecture, University College, Auckland, New Zealand. Exempted from Final Examination], Lauriston, Tauranga, New Zealand. Applying for nomination by the Council under the provisions of Bye-law 3 (d).

AS LICENTIATES (7)

CLARIDGE: GEORGE JAMES ROBINSON, 168b Broadway, Bexleyheath: Cartref, Erith Road, Bexleyheath. Proposed by Kendrick Edwards and Sydney Tatchell and applying for nomination by the Council under the provisions of Bye-law 3 (d).

COPSON: PERCY GEORGE, Estate Department, Messrs. P. Phipps and Co., Ltd., 8 Gold Street, Northampton: 137 The Drive, Northampton. Proposed by F. H. Allen and the President and Hon. Secretary of the Northamptonshire, Bedfordshire and Huntingdonshire Association of Architects under the provisions of Bye-law 3 (a).

GALE: JACK ELEFTROM, London County Council Architects Department, County Hall, S.E.1: Flat 3, 2 Westbourne Grove Terrace, W.2. Proposed by E. P. Wheeler, W. T. Sadler and F. R. Horris.

HARRISON: THOMAS WINDER, 13 North Street, Ashford, Kent: 84 Queen's Road, Ashford, Kent. Proposed by Edwin A. Jackson and the President and Hon. Secretary of the South-Eastern Society of Architects under the provisions of Bye-law 3 (a).

LOWE: JOHN COTTRELL, East Surrey Water Company, Redhill: Shieling, Church Hill, Merstham, Surrey. Proposed by James J. S. Naylor, Thomas Wallis and W. Walcot.

ROBERTS: IVAN FREDERICK, Station Road West, Oxted, Surrey. Proposed by Hugh Macintosh and the President and Hon. Secretary of the South-Eastern Society of Architects under the provisions of Bye-law 3 (a).

WILSON: STEPHEN GRYLLS, M.A., 42 George Street, Oxford. Proposed by Isaac Taylor, T. Lawrence Dale and W. Braxton Sinclair.

APPLICATIONS FOR MEMBERSHIP

ELECTION: 22 JUNE 1936

In accordance with the terms of Bye-laws 10 and 11, the following candidates for membership were elected at the Council Meeting held on Monday, 22 June 1936.

AS FELLOWS (4)

LAW: OLIVER WILLIAM MAFEKING [A. 1929]

MACGREGOR: JAMES, M.A., M.T.P.I. [A. 1915], Edinburgh.

MACKELLAR: ROBERT NORMAN HOUGHTON [A. 1914], Newcastle-upon-Tyne.

WILLIAMS: GEORGE [A. 1929], Hull.

AS ASSOCIATES (17)

CRUICKSHANK: ALEXANDER STEWART [Special Final Examination], Cape Town, South Africa.

DUFFY: ARTHUR RICHARD [Passed five years' course at the Liverpool School of Architecture, University of Liverpool. Exempted from Final Examination], Southport, Lancs.

FORSYTH: WILLIAM LESLIE HOOD [Passed the Examination of the Royal Australian Institute of Architects and elected Associate of the Royal Victorian Institute of Architects and the Royal Australian Institute of Architects], Melbourne, Australia.

GOODING: JOHN FRANCIS ROWLAND [Passed five years' course at the Birmingham School of Architecture. Exempted from Final Examination], Birmingham.

GRANT: DOUGLAS ADSHEAD, B.Arch. [Passed five years' course at the Liverpool School of Architecture, University of Liverpool. Exempted from Final Examination].

GREEN: DAVID JOHN, A.A.Dip. [Passed five years' course at the Architectural Association. Exempted from Final Examination], Lowestoft, Suffolk.

HARDY: RONALD, B.Arch. [Passed five years' course at the Liverpool School of Architecture, University of Liverpool. Exempted from Final Examination].

C

MALINS: SAMUEL EDWARD [Passed five years' joint course at the Birmingham School of Architecture and the Architectural Association. Exempted from Final Examination].

MARSHALL: STIRRAT ANDREW WILLIAM JOHNSON [Passed five years' course at the Liverpool School of Architecture, University of Liverpool. Exempted from Final Examination].

METCALF: HALL [Passed an Examination approved by the Royal Australian Institute of Architects' Council as equivalent to the Final Examination of the R.I.B.A.], Wahroonga, Australia.

MORENA: NOSHUR BURJORJI [Final], Bombay, India.

NEWTON: ROLAND [Passed five years' course at the School of Architecture, Victoria University, Manchester. Exempted from Final Examination], Bolton, Lancs.

REDFERN: BERNARD EDGAR [Passed five years' course at the Liverpool School of Architecture, University of Liverpool. Exempted from Final Examination], Birkenhead.

ROBERTS: RICHARD EMRYS [Passed five years' course at the Liverpool School of Architecture, University of Liverpool. Exempted from Final Examination], Holywell.

STEWART: CECIL [Passed five years' course at the School of Architecture, Edinburgh College of Art. Exempted from Final Examination].

TAYLER: HERBERT [Passed five years' course at the Architectural Association. Exempted from Final Examination].

WOOD: JOHN CHARLES SAVILE, Dip.Arch.(Leeds) [Passed five years' course at the Leeds School of Architecture. Exempted from Final Examination], Leeds.

AS LICENTIATES (7)

BUCKINGHAM: GEOFFREY SAMBROOKE, Norwich.

BURCHELL: NOEL EDMUND IRONSIDE, Dalkeith.

CRUICKSHANK: WILLIAM SHAW, Manchester.

EDMUNDS: REGINALD LEWIS, Newport, Mon.

HOLE: ROLAND RALPH, F.S.I., Haverfordwest.

LITCHFIELD: WILLIAM ERNEST.

ROSENAUER: MICHAEL.

Competitions

The Council and Competitions Committee wish to remind members and members of Allied Societies that it is their duty to refuse to take part in competitions unless the conditions are in conformity with the R.I.B.A. Regulations for the Conduct of Architectural Competitions and have been approved by the Institute.

While, in the case of small limited private competitions, modifications of the R.I.B.A. Regulations may be approved, it is the duty of members who are asked to take part in a limited competition to notify the Secretary of the R.I.B.A. immediately, submitting particulars of the competition. This requirement now forms part of the Code of Professional Practice in which it is ruled that a formal invitation to two or more architects to prepare designs in competition for the same project is deemed a limited competition.

COMPETITION FOR NEW MUNICIPAL OFFICES, LOUTH

The Competitions Committee desire to call the attention of members to the fact that the conditions of the above competition are not in accordance with the Regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime members should not take part in the competition.

COMPETITION FOR NEW SCHOOL, WORCESTER

The Competitions Committee desire to call the attention of members to the fact that the conditions of the above competition are not in accordance with the regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime members should not take part in the competition.

COMPETITION FOR SCHEME FOR IMPROVING LAY-OUT OF CLEETHORPES PIER GARDENS, ETC.

The Competitions Committee desire to call the attention of members to the fact that the conditions of the above competition are not in accordance with the regulations of the Town Planning Institute, which also govern all members of the R.I.B.A. and its Allied Societies.

The Town Planning Institute are in negotiation with the promoters in the hope of securing an amendment. In the meantime members should not take part in the competition.

ASCOT GAS WATER HEATERS, LTD.: EXHIBITION STAND FOR OLYMPIA

Messrs. Ascot Gas Water Heaters, Ltd., are holding a competition, open to British subjects who are members of the architectural profession, for a design for an Exhibition Stand for the Building Trades Exhibition at Olympia in September, 1936.

Assessors: Mr. Keith D. P. Murray [A.].

Mr. G. Grey Wornum [F.].

Mr. F. R. Yerbury [Hon. A.].

Premiums: £100, £25, and £5.

Last day for receiving designs: 6 July 1936.

Conditions of the competition may be obtained on application to Ascot Gas Water Heaters, Ltd., 244 High Holborn, London, W.C.1.

BARKING: NEW TOWN HALL AND MUNICIPAL BUILDINGS

The Barking Corporation invite architects practising in the United Kingdom to submit in competition designs for a new Town Hall and Municipal Buildings to be erected at a cost not exceeding £160,000.

Assessor: Mr. H. V. Lanchester [F.].

Premiums: £500, £250 and a further £200 to be awarded as recommended by the Assessor.

Last day for receiving designs: 14 September 1936.

Last day for questions: 1 May 1936.

Conditions of the competition may be obtained on application to Mr. S. A. Jewers, Town Clerk, Town Hall, Barking. Deposit £2 2s.

BELFAST: NEW WATER OFFICES

The Belfast City and District Water Commissioners are proposing to hold a competition for new Office Buildings and Mr. H. Austen Hall [F.] has been appointed to act as Assessor. Conditions are not yet available.

BIRMINGHAM: NEW CENTRAL TECHNICAL COLLEGE, ETC.

The Corporation of the City of Birmingham are to hold a competition for a new Central Technical College, Commercial

College and School of Arts and Crafts. Mr. J. R. Adamson [F.] has been appointed to act as Assessor and the premiums to be offered will be £750, £500 and £250. Conditions will be issued in the near future.

BIRMINGHAM: WORKING-CLASS FLATS

The Public Works and Town Planning Committee of the City of Birmingham invite architects of British nationality practising in the British Isles to submit in competition designs for working-class flats to be erected in concrete on the Emily Street and Vaughton Street area.

Assessor: Mr. Louis de Soissons, O.B.E., S.A.D.G. [F.].

Premiums: £400, £250, £150, and £100.

Last day for receiving designs: 11 July, 1936.

Last day for questions: 9 May, 1936.

DARTFORD: NEW MUNICIPAL OFFICES AND ASSEMBLY HALL

The Dartford Town Council invite architects practising in the United Kingdom to submit in competition designs for new Municipal Offices and Assembly Hall.

Assessor: Mr. P. D. Hepworth [F.].

Premiums: 200, 100 and 50 guineas.

Last day for receiving designs: 21 August 1936.

Last day for questions: 29 June 1936.

Conditions of the competition may be obtained on application to Mr. J. James Hurtle, Town Clerk, Town Clerk's Office, Dartford. Deposit £1 1s.

DUNDEE: COLLEGE OF ART

The Dundee Institute of Art and Technology are to hold a competition for the Duncan of Jordanstone College of Art and Mr. J. R. Leathart [F.] has been appointed to act as Assessor. Conditions are not yet available.

EDMONTON: NEW TOWN HALL BUILDINGS

The Edmonton Urban District Council are proposing to hold a competition for new Town Hall Buildings, and Mr. E. Berry Webber [A.] has been appointed to act as Assessor. No conditions are available yet.

HOLBORN: PUBLIC BATHS AND WASHHOUSES

The Council of the Metropolitan Borough of Holborn are proposing to hold an open competition for the rebuilding of the Public Baths and Washhouses in Broad Street and Endell Street, and the President has nominated Mr. Kenneth M. B. Cross [F.] to act as Assessor. Conditions are not yet available.

LEEDS: NEW CENTRAL PUBLIC BATHS

The Corporation of Leeds are to hold a competition open to architects of British nationality, for new Central Public Baths. The assessor is Mr. Kenneth M. B. Cross [F.], and premiums of £350, £200 and £100 will be offered. Conditions will be available in the near future.

LLANDUDNO: NEW HOSPITAL BUILDINGS

The Committee of the Llandudno and District Hospital are to hold a competition, open to architects of British nationality, for new hospital buildings at Llandudno. The assessor is Mr. R. Norman Markellar [F.], and premiums of £250, £150 and £75 will be offered. Conditions will be available in the near future.

SYDNEY, NEW SOUTH WALES: EXTENSION OF ST ANDREW'S CATHEDRAL

The Authority in the Diocese of Sydney of the Church of England invite architects who are British subjects, and members of the Royal Australian Institute of Architects, the Royal Institute of British Architects or the Allied and Associated Societies, to submit, in competition, designs for extension of St. Andrew's Cathedral, George Street, Sydney, and other cathedral buildings.

Assessors: His Grace the Archbishop of Sydney.

Sir Giles Gilbert Scott, R.A. [F.].

Mr. Bertrand J. Waterhouse [F.].

Premiums: £500, £300 and £200.

Last day for submitting designs (which must be forwarded direct to Sydney): 28 February 1937.

Last day for questions: 11 August 1936.

Conditions of the competition may be obtained by architects in the British Isles on application, *not later than 11 July 1936*, to The Secretary, R.I.B.A., 66 Portland Place, London, W.1.

TIMBER "TOURIST CAMP"

The Timber Development Association, Ltd., are holding a competition for the layout and individual design of a group of camp buildings for a holiday camp, in timber.

Assessors: Mr. E. Guy Dawber, R.A., F.S.A. [F.].

Mr. G. A. Jellicoe [F.].

Mr. G. Langley Taylor [F.].

Mr. John Gloag.

Premiums: £150, £50, £25 and three special mention awards of £10 each.

Last day for receiving designs: 26 October 1936.

Conditions may be obtained on application to The Timber Development Association, Ltd., 69-73 Cannon Street, London, E.C.4.

COMPETITION FOR JOINT RAILWAY RECEIVING OFFICES IN LONDON

The four main railway companies (L.N.E.R., L.M.S., G.W.R. and Southern) are proposing to hold a competition for a design for Standard Joint Railway Receiving Offices in London, and the following have been appointed to act as Assessors: Mr. L. H. Bucknell [F.], Mr. C. Grasemann, Mr. W. H. Hamlyn [F.], Mr. Charles Holden [F.], Vice-President, R.I.B.A. No conditions are available yet.

COMPETITION RESULTS

COVENTRY: BABLAKE SCHOOL, NEW SCIENCE BLOCK

The result of the above competition, published in our issue for 6 June, should read as follows:—

1. Mr. H. T. Jackson [A.] (Coventry).
2. Mr. B. S. Tempest [A.] (Coventry).
3. Mr. H. Whiteman [L.] (Coventry).

LUTON: NEW SECONDARY SCHOOL

1. Messrs. Marshall and Tweedy [FF.] (London).
2. Messrs. A. K. Taylor [A.], and J. W. Davidson [Student] (Sheffield).
3. Mr. Paul Pascoe [A.] (London).

MINUTES XII

SESSION 1935-1936

At the twelfth general meeting of the Session 1935-1936, held on Monday, 22 June 1936, at 8 p.m., Mr. Percy E. Thomas, O.B.E., President, in the chair.

The meeting was attended by about 120 members and guests.

The minutes of the annual general meeting held on 11 May 1936, having been published in the JOURNAL, were taken as read, confirmed and signed as correct.

The Hon. Secretary announced the decease of:—

The Rev. Percy Dearmer, M.A., D.D. Professor of Ecclesiastical Art and Lecturer in Art, King's College, University of London. Elected an Hon. Associate 1925.

Charles Howard Walker, elected Hon. Corresponding Member (U.S.A.) 1931.

John Clarke, elected Associate 1875, Fellow 1882.

John Arnold Crush, transferred to Fellowship 1925.

Henry Whiteman Rising, elected Fellow 1903.

Alfred Stoner, F.S.I., elected a member of the Society of Architects in 1884 and transferred to Retired Membership in 1916.

William Victor Coates, elected Associate 1911.

James Richard Fleming, elected Associate 1897.

Frank Berridge Cooper, elected Associate 1895, transferred to Retired Associateship 1933.

James William Frazer, elected Associate 1890, transferred to Retired Associateship 1935.

Charles Alfred Geen, elected Associate 1909, transferred to Retired Associateship 1936.

Frank Brooksby, elected Licentiate 1933.

Arthur Peel, transferred to Licentiate 1925.

William Albert Baynes, elected Licentiate 1912, transferred to Retired Licentiate 1934.

And it was resolved that the regrets of the Institute for their loss be entered on the minutes and that a message of sympathy and condolence be conveyed to their relatives.

The following members attending for the first time since their election were formally admitted by the President:—

Associates:

M. D. Furniss.
Alan H. Hodgson.
R. F. Lomax.
Henry A. Metayers.
R. H. Ouzman.
Harold Short.

Licentiates:

Alexander G. Black.
H. Jackman.

Students:

A. P. Gwynne.
Stanley Meyrick.
F. G. Milsom.
Edric Neel.
N. K. Purnell.

Professor Wm. Emerson (Hon. Corresponding Member), Director of the Department of Architecture, Massachusetts Institute of Technology, briefly addressed the meeting with particular reference to the recent election of the President as an Hon. Corresponding Member and the Secretary as an Honorary Member of the American Institute of Architects.

The Secretary having read the report of the Scrutineers on the results of the Annual Election for Council, Standing Committees and Hon. Auditors, the President declared that the Officers, Members of Council, Standing Committees and the Honorary Auditors for the Session 1936-1937 were duly elected in accordance therewith.

On the motion of the President a vote of thanks was passed by acclamation to the Scrutineers for their labours.

Col. W. Garforth, D.S.O., M.C., having given a short talk on "A Few Principles of Protection in Air Raids" a discussion ensued, and on the motion of Mr. Thos. E. Scott [F.], Chairman of the Science Standing Committee, a vote of thanks was passed to Col. Garforth by acclamation and was briefly responded to.

The proceedings closed at 9.33 p.m.

Members' Column

Owing to limitation of space, notices in this column are restricted to changes of address, partnerships vacant or wanted, practices for sale or wanted, office accommodation, and appointments vacant. Members are reminded that a column in the Advertisement Section of the Journal is reserved for the advertisements of members seeking appointments in architects' offices. No charge is made for such insertions and the privilege is confined to members who are definitely unemployed.

PARTNERSHIP WANTED

FELLOW of wide general experience seeks partnership in Bristol or West of England town. Experienced in school design. Former Lecturer in Architecture. Some capital available.—Box No. 2366, c/o Secretary R.I.B.A.

OFFICES TO LET

SENIOR, with pleasant offices in the Temple, offers furnished accommodation to another architect or surveyor on very moderate terms. Good opportunity for young practitioner or provincial architect desiring London address.—Box No. 5636, c/o Secretary R.I.B.A.

FELLOW wishes to let a small self-contained furnished office in the Strand, near Trafalgar Square. The room is on the third floor, and provided with light and heat. Rent £4 a month. Box 1066, c/o Secretary R.I.B.A.

TWO ROOMS, well lit, now available in Holborn District, suitable for architect.—Apply Box 6636, c/o Secretary R.I.B.A.

ASSISTANTS WANTED

ACCURATE and reliable Assistant Draughtsman required for specialist work. Experience in perspective desirable but not essential. Apply in own handwriting, stating age, experience, salary required and particulars of general and architectural education, and names of two references.—Jno. Waldram & Son, 9 Gray's Inn Square, W.C.1.

QUALIFIED Assistant required as manager in a new Devonshire office, with view to later partnership.—Box No. 4636, c/o Secretary R.I.B.A.

CONTINUATION OF PRACTICE

G. K. CROWE [A.] is, under his own name, continuing the practice of the late F. G. Robb, M.R.A.I.C., at 1178 Phillips Place, Montreal, Canada.

PRACTICE WANTED

MEMBER practising in Devonshire would consider purchase of a practice in south-west or continuation by arrangement on reasonable terms.—Box No. 3636, c/o Secretary R.I.B.A.

SHARE IN OFFICE

MEMBER is prepared to share office in Victoria Street with another member or professional associate. No clashing of interests need be apprehended.—Apply Box No. 6536, c/o Secretary R.I.B.A.

SHARE IN PRACTICE WANTED

ASSOCIATE, with family connections in West of England, seeks a share in practice there.—Box 1466, c/o Secretary R.I.B.A.

CHANGES OF ADDRESS

FROM July all letters to Mr. Henry James Wise [F.] should be addressed to him at Newton Blossomville, near Turvey, Bedford. Telephone No. Turvey 30.

MR. J. FRANCIS SMITH [A.], P.A.S.I., has entered into private practice at 3 and 4 Clement's Inn, Strand, W.C.2.

MR. S. F. J. MASKELL [A.] has changed his address to Office of Public Works, St. Stephen's Green, Dublin.

MR. GEORGE VERNON [A.] has removed his offices from 19 Russell Square, Bloomsbury, to 9 Seymour Street, Portman Square, W.1.

MISS CARMEN SMITH [S.], has changed her address to 27 Eccleston Square, S.W.1.

CHANGES OF ADDRESS AND NEW PARTNERSHIP

MR. T. GORDON JACKSON [F.] is removing his offices on the 27th inst. from 7 Great James Street, W.C.1, to 1 & 2 Gray's Inn Place, Gray's Inn, W.C.1 (telephone: Holborn 9956). He is being joined in partnership by Mr. Lister P. Rees [A.], and the practice

will thereafter be carried on as Gordon Jackson & Rees, Chartered Architects, at the new address.

MR. LISTER P. REES desires to inform his clients and friends that he is removing his offices on 1 July next to Nos. 1 and 2 Gray's Inn Place, W.C.1 (Telephone No. Holborn 9956), and that he is shortly joining Mr. T. Gordon Jackson [F.] in partnership: the style of the firm will then be Messrs. Gordon Jackson & Rees, F/A.R.I.B.A.

PRACTICE FOR SALE

ASSOCIATE wishes to sell well-established practice in important S.E. coast town. The practice is flourishing, and has shown a steady annual increase, which could be still further developed. Good proportion of clientele give assured and recurring work. Good offices and fittings. Owner selling for reasons in no way connected with practice. Apply in confidence to Box 2266, c/o Secretary R.I.B.A.

A.B.S. Insurance Department PENSION AND FAMILY PROVISION SCHEME FOR ARCHITECTS

This scheme has been formulated by the Insurance Committee of the Architects' Benevolent Society and is available to all members of the R.I.B.A. and its Allied and Associated Societies.

The benefits under the scheme include:—

(1) A Member's Pension, which may be effected for units of £50 per annum, payable monthly and commencing on attainment of the anniversary of entry nearest to age 65. This pension is guaranteed over a minimum period of five years and payable thereafter for the remainder of life.

(2) The Beneficiary's Pension, payable as from the anniversary mentioned in Benefit No. 1, but to the widow (or other nominated beneficiary) if the member dies before age 65. The amount of this pension is adjusted in accordance with the disparity between the ages of the member and his wife.

(3) Family Provision. Under this benefit a payment of £50 yearly is made to the dependent from the date of death of the member prior to age 65 until attainment of the anniversary previously mentioned, after which benefit No. 2 becomes available.

Provision can be made for any number of units (of £50 per annum) up to a maximum of £500 per annum.

Pension benefit only may be secured if desired and the pension commuted for a cash sum.

Members are entitled to claim rebate of Income Tax on their periodical contributions to the scheme both in respect of pension and of family provision benefit.

Full particulars of the scheme will be sent on application to the Secretary, A.B.S. Insurance Department, 66 Portland Place, W.1.

It is desired to point out that the opinions of writers of articles and letters which appear in the R.I.B.A. JOURNAL must be taken as the individual opinions of their authors and not as representative expressions of the Institute.

Members sending remittances by postal order for subscriptions or Institute publications are warned of the necessity of complying with Post Office Regulations with regard to this method of payment. Postal orders should be made payable to the Secretary R.I.B.A., and crossed.

R.I.B.A. JOURNAL

DATES OF PUBLICATION.—1936.—18 July; 8 August; 5 September; 17 October.

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